Household Retirement Savings: The Location of Savings Between Spouses

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Abstract

Retirement planning is often a joint household decision-making process, and therefore the household is often the more appropriate unit of analysis. However, retirement savings in tax advantaged accounts are held in the name of one individual. While spouses have rights to these assets in the case of divorce and in most cases of death, the separation of accounts in name may cause couples to treat their accounts as separate, with each spouse making decisions separately.

In order to optimize retirement planning, couples should consider the entire household portfolio together, accounting for the characteristics of the retirement accounts, the age of the spouses, and income differences between spouses. With separate accounts, one spouse may not be aware of the contributions or assets accumulated in the other spouse's accounts. This may lead to sub-optimal decision-making, as individuals in a couple may not fully optimize across all available retirement accounts.

Little is known about how households divide retirement contributions and assets between spouses. In this project, we investigate how households locate contributions across tax deferred savings accounts that are nominally held in one spouse's name and how these decisions may impact accumulated assets. In particular we first document who within a couple nominally holds retirement assets. Using data from the Health and Retirement Study and Survey of Consumer Finances, we find that household retirement assets and contributions are more likely to be located in accounts held in the husband's name or the primary earner's name. In our regression analysis, we find that the location of contributions is largely driven by the distribution of earnings within couples.

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1. Introduction

Research on retirement savings tends to focus on the behavior of individuals in isolation or the behavior of households. This perspective of retirement planning glosses over a very important factor: the choices made *within* households for each individual. Even among households who share finances[1] and who intend to share finances in retirement, retirement savings accounts are typically held in only one person's name.

Retirement planning is typically a joint household decision-making process, and therefore, in studying retirement planning, the household is the more appropriate unit of analysis. Research on retirement timing has found that many couples retire at the same time or close to the same time, suggesting that retirement is a joint activity (Hurd 1990; Maestas 2001; Coile 2004; Gustman and Steinmeier 2004; Banks, Blundell, and Rivas 2010; Michaud and Vermeulen 2011). Furthermore, changes in labor income or retirement income for one spouse can affect the labor supply and retirement decisions of the other spouse (Baker 2002; Lalive and Staubli 2014). There is mixed evidence about whether households coordinate the allocation of assets between safe and risky assets across retirement accounts (Uccello 2000; Jianakoplos and Bernasek 2008; Yilmazer and Lyons 2010); carefully addressing this question however, should first consider the location of assets, as we do in this study. Finally, a shared household budget is common among couples.

Despite the importance of the couple as the relevant unit of analysis in retirement, retirement savings in tax advantaged accounts, such as employer-sponsored defined contribution (DC) plans or Individual Retirement Accounts (IRA), are held in the name of one individual. Spouses have rights to these assets in the case of divorce and in most cases of death.[2] In either case, several options are available, including the possibility that a spouse may rollover funds into their own retirement account. However, the separation of accounts in name may cause the two individuals in a couple to treat their accounts as separate. Each can make their own decisions about how much to save, how to invest, or withdrawing funds, either at retirement age or early through a cash out or loan.

In order for couples to maximize their potential consumption in retirement, the entire household portfolio should be considered together. In particular households should consider the

[1] For example, Klatwitter (2008) estimates that 83 percent of married, opposite–sex couples hold at least one joint financial account.

[2] Rules for beneficiaries vary depending on the type of account. Account holders can designate any beneficiary in the case of death of the account holder, but if assets pass to a spouse, the transferred assets are typically not taxable.

optimal location for the retirement assets and contributions.[3] The decision of where to locate new contributions should take into account the characteristics of the retirement accounts, the age of the spouses, and income differences between the spouses, especially if only one spouse works for pay. For example, households should locate contributions to take advantage of any available employer match, and should favor contributions toward the older spouse, where funds can be withdrawn earlier without tax penalty. Alternately, some might choose to split their savings equally between accounts, which might seem fair and would limit transaction costs in the case of divorce.

A further complication created by separate accounts is one spouse may not be fully aware of the contributions or assets accumulated in the other spouse's retirement accounts. This may lead to sub-optimal decision-making, as individuals in a couple may not fully optimize across all available retirement accounts. Furthermore, if individuals are less aware of their spouse's retirement holdings, surveys where individuals are asked to report about these accounts for their household may provide incomplete information about household assets.

Despite the importance of taking a household perspective to study retirement savings choices, little is known about how households divide retirement assets between spouses. For this project, we investigate how households locate assets and savings across tax deferred savings accounts that are nominally held in one spouse's name. In particular we are interested in

1. How are retirement savings located within a couple? To what extent do households locate retirement savings equally between accounts for each spouse or between primary and secondary earners?
2. Do households effectively locate retirement savings across each spouse's accounts taking into account possible employer matches or age differences?
3. Are financial respondents in surveys able to report accurately about the existence of IRAs and retirement balances for their spouse?

This paper contributes to the literature on household retirement savings by being the first to address the questions about how household locate retirement savings. To address our research questions, we use three data sources, the Health and Retirement Study (HRS), the Survey of Consumer Finances (SCF), and the American Life Panel (ALP). Each of the data sources provides information about retirement savings for households.

For this report, we document the current location of assets and contributions for couples in the HRS and the SCF. We focus on the split of employer sponsored DC plan assets and contributions across husbands and wives and across primary and secondary earners. We also use multiple regression analysis to identify what factors predict which spouse has higher accumulated assets or a higher current savings rates in employer-based accounts in the HRS and

[3] Here we use the word "location" and "locate" to refer to which account or what type of account assets and savings are in. This is in contrast to the allocation of assets, which is typically used to refer to the mix between stocks and bonds.

the SCF. For the SCF and HRS we also consider the location of IRA balances. The ALP is used to investigate the differences between spouses' reporting of accounts held in the name of one's spouse.

We find that contributions to husbands' DC accounts are greater than those to wives' accounts in absolute amounts, but that retirement contributions as a percent of earnings are much closer. We find even larger disparities in retirement contributions as well as retirement assets when, instead of comparing husbands and wives in married couples, we compare contributions of primary and secondary earners. Given the differences in contributions, it is not surprising that we find that husbands' retirement account balances tend to be larger than their wives' retirement account balances. In the regression analysis, we find that the distribution of income between spouses, rather than the incentives created by the rules of retirement accounts, determine the location of contributions and assets.

2. Previous Literature on Household Retirement Savings Decisions

In order to understand how couples make decisions about retirement savings, it is helpful to look to the past literature on household decision making in the context of retirement. There is a large literature using both structural and reduced form models to study retirement timing. The structural models place great emphasis on the structure of households' utility functions. The earliest attempts at modeling joint retirement decisions used a unitary model of retirement (Hurd 1990), meaning households maximize a single joint utility function, and do not allow for competing preferences between spouses. Spousal interactions were incorporated into later literature. Gustman and Steinmeier (2004) consider a non-cooperative strategic interaction model, where household members solve a simultaneous Nash equilibrium. The cooperative bargaining model, as described by Browning and Chiappori (1998) is the most widely used model in the literature on joint household decisions. Maestas (2001) and Michaud and Vermeulen (2011) use this model to study joint retirement decisions. According to this model, household decisions are based on a joint utility function that weights the preferences of each spouse, according to some measure of bargaining power. The cooperative bargaining model generally implies that some compromise is made that takes into account the preferences of each spouse. In the case of Maestas (2001) for example, spouses tend to coordinate their retirement timing, responding to the preferences of each spouse, but placing greater emphasis on preferences of the spouse with higher lifetime earnings and finding greater concordance of retirement timing among couples who enjoy spending time together relatively more. The

structural literature largely supports the hypothesis that households are jointly making retirement timing decisions.

There is a complementary reduced form literature that examines retirement timing decisions within the household context and seeks to identify the extent to which spouses coordinate. Coile (2004) estimates the probability that an individual member of a married couple retires as a function of his or her own retirement financial incentives (social security, pensions, etc.) and his or her spouse's retirement incentives. She finds that husbands are less likely to retire if their wives have a strong financial incentive to continue working, but that wives do not exhibit a reciprocal response. She hypothesizes that for husbands, their wives' leisure is a strong complement to their own. Banks, Blundell, and Rivas (2010), similarly examine the effect of spouses' Social Security incentives on an individual's probability of retiring, but find no spousal effect for men or women. Baker (2002) and Lalive and Staubli (2014) find evidence that labor supply is weakly responsive to changes in spouses' Social Security benefits.

Taken together these papers suggest that couples make retirement timing decisions jointly. Given this joint retirement goal, we would expect couples to also coordinate retirement savings decisions, however previous literature has not addressed this specific question in the US context.

The related literature on household financial decision making also finds that financial decisions more broadly tend to be made jointly. Much literature on joint household decision making focuses on intra-household division of involvement in financial decisions, where they find that women's role in household decision making generally increases with their income, education, and financial literacy/knowledge. For example, Bernasek and Bajtelsmit (2002) study degree of involvement in household financial decision making and find that women's involvement in making financial decisions for the household is positively associated with their share of the total household income. Bertocchi, Brunetti, and Torricelli (2014) investigate determinants of intra-household decision power using the 1989 – 2010 Bank of Italy Survey of Household Income and Wealth and find that women are more likely to be responsible for household decisions as their age, educational attainment, and income become equal to or greater than that of their spouses. The impact of education and income on financial decision making may be a result of bargaining power, as described in the discussion of cooperative bargaining models above. Smith, McArdle, and Willis (2010) use data from the HRS and find that the spouse with higher numeracy is more likely to make financial decisions in the family, but that this trait has a larger effect for husbands than for wives. Lastly, literature on allocation of funds between risky and less risky assets shows the impact of household decision making on investment decision making. They find that households in which women have higher bargaining power tend to hold fewer risky assets. (Jianakoplos and Bernasek 2008, and Yilmazer and Lyons 2010).

Studies of how households locate assets across individual accounts find that women hold more assets in individual accounts in households in which they have greater bargaining power. Grabka, Marcus and Sierminska (2015) look at how household members locate assets (not necessarily retirement) across spouse accounts. They analyze individual-level micro data from

the German Socio-Economic Panel and find that within couples, men have, on average, 33,000 euros more in assets than women. This intra-household wealth gap between men and women decreases with the woman's income, her involvement with financial decisions within the partnership, and if she has received an inheritance. Lee and Pocock (2007) find that in South Korea, where almost all financial accounts are individual accounts, married women with strong bargaining power save relatively more in their own accounts.

Yang and Devaney (2012) analyze SCF data and find some evidence on how spouses locate retirement assets. In the SCF, respondents were asked about their spouse's financial knowledge. The authors find that respondents who report that their spouse is financially knowledgeable were less likely to have retirement assets, which may suggest that households place retirement assets with the more financially knowledgeable spouse. Other papers on retirement accounts of households find a spousal effect on participation and on retirement asset allocation. For example, Sung and Hanna (1998) find that a spouse's participation in retirement plans significantly increases the other spouse's participation. Spouses also influence each other's stock holdings in retirement plans (Arano et al. 2010; Yilmazer and Lyons 2010; and Uccello 2000)

Because we are interested in knowing whether households optimally respond to matches or tax code treatment in considering how to locate retirement assets across spouses' accounts, some relevant findings come from studies that have looked at countries where spouses are taxed separately. There is evidence that households shift investments (and therefore investment income) to the less-heavily taxed spouse. For example, Stephens and Ward-Batts (2004) use data from the Family Expenditure Survey to study the impact of moving from joint to independent taxation of spouses' income on asset allocation within households in the United Kingdom. They find that assets were shifted to and claimed by the spouse facing lower marginal tax rates as a result of the policy change. Alan et al. (2010) investigate how differential taxation influences household asset allocation among Canadians using the Canadian Survey of Financial Security. They exploit a 1988 tax reform that effectively reduced the marginal tax rate of women married to high-income spouses, but not women married to low-income spouses. They find that households with a high-income husband shifted capital assets to the woman after the tax reform. On the other hand, Phipps and Woolley (2008) find that Canadian households do not necessarily minimize taxes when considering which spouses' name under which to save for retirement. They find that increases in men's income are associated with a much larger increase in men's savings into a Canadian tax-deferred retirement savings plan than in their spouses' retirement savings plan, even though it is usually ideal to contribute more to the spouse with lower income (typically, the wife) to minimize tax liability. Our research adds to this literature in that it is the first study that explores the location of retirement assets and contributions across spouses in the US retirement context.

3. Optimal Asset Location

Optimal location of contributions and assets should consider which spouse has access to the most favorable tax-deferred retirement accounts. For example, if one spouse has access to an employer match, households should first take advantage of that match before saving in other accounts, all else equal. The age of spouses may also influence the optimal location of assets, particularly when there are large differences in age between spouses. For households who want to have the option to access funds without penalty at the earliest possible date, there is an advantage to saving in the account of the older spouse, who will reach age 59 ½ at an earlier date, and thus typically be able to begin withdrawing from tax-deferred accounts without penalty at an earlier date. Alternatively, for households who want to delay required minimum distributions, there is an advantage to saving in the account of the younger spouse. Income differences might also affect the optimal location of funds if a couple's desired total retirement savings through employer-based accounts is greater than one spouse's income. Among couples where only one spouse has access to an employer-sponsored retirement plan, IRAs can provide an opportunity for non-working spouses to also save for retirement in a tax advantaged account and provide an opportunity for couples to save more.

An alternate rule of thumb that some couples might follow would be to split retirement savings equally into accounts in each spouse's name. This might save on transaction costs in the case of divorce, since assets could be easily divided between the two individuals. Furthermore, it may seem like a fair allocation of funds. However, because retirement accounts are treated as joint property and funds can be transferred without penalty in the case of divorce, dividing savings equally between accounts while married is, in many cases, not optimal unless spouses are the same age, earn the same income, and have retirement plans with the same features. One exception is households that save the maximum allowable amounts in tax-deferred retirement accounts. In this case we would expect to see equal amounts of savings across the two members of a couple.

There are limitations. First, while couples are married, tax advantaged retirement account balances can not be rolled over into a retirement account held in the other spouse's name. Second, the amount that can be contributed to an employer-sponsored DC plan is limited by the owner's income. However, contributions can be made to an IRA in excess of the owner's income, if contributions do not exceed total household income. Third, the optimal division of contributions across accounts is contingent on joint ownership of accounts. If couples are not legally married the incentives described above may not hold. In particular, the surviving member of an unmarried couple could lose access to funds saved if the other partner died if the surviving member was not designated as a beneficiary. Or in the case of separation, each member would lose access to their former partner's assets. Thus in the case of partnership,

incentives and expectations may differ from married couples, and therefore, the optimal division of contributions may be different from that of married couples.

4. Data

To address our research questions, we use three data sources, the HRS, the SCF, and the ALP. Each of the data sources provides information about retirement savings for households.

4.1 Health and Retirement Study Data

The HRS is a study of households, conducted every two years since 1992. The primary goal of the study is to understand aging households with a particular focus on planning for retirement. The HRS is a nationally representative survey of households with at least one member aged 50 or older. The HRS contains several cohorts including the initial cohort recruited in 1992, as well as younger cohorts who have not yet reached the age of retirement. Households are recontacted every two years, allowing researchers to study how retirement planning changes over time. Where possible we draw from the RAND HRS, which provides a cleaned, easy-to-use version of the HRS, but we mainly use the original HRS data for data on retirement plans.

A key strength of the HRS for our analysis is that it was designed to improve our understanding of retirement planning. In particular, employer-based retirement questions are asked to each respondent in the household, allowing us to paint a clear picture of those assets and contributions. However, there are several limitations to the HRS data. First, the data are only collected for households with one member over the age of 50 and thus, are not representative of the full population. Second, employer-based plans are treated differently from other retirement accounts in the survey, and thus, data across the two types of accounts may not be consistent. Third, current IRA contributions are not tracked separately for each spouse. Fourth, a key limitation of the HRS, and any survey that asks about retirement accounts is that many people have limited knowledge of the plans available to them. DiCenzo (2014) summarizes the literature that has looked at matched survey and employer data about retirement plans. This literature finds that participants have trouble understanding what type of plan they participate in; it's easy to imagine that non-participants have an even harder time reporting details and characteristics for retirement plans that they do not participate in.

Couples are recruited to join the HRS if *one* spouse is 50 or older, and are followed over time. However, *both* spouses are invited to participate in the panel, and data can be collected from both spouses. For this analysis, we use the most recent wave, 2012, of the HRS, and we restrict our sample to married, opposite-sex couples where both spouses participated in the

HRS.[4] By choosing the most recent year, we also have the closest comparison to the SCF, discussed below, which was fielded in 2013. In some cases, only one spouse participates; we exclude these couples because we do not have information about pensions for the spouse that does not participate. We focus on married couples because as described above, the incentives for asset location are more clear for married couples. This leaves us with a sample of 5608 couples.

We further restrict our sample to couples in which at least one spouse is currently working (including those who are partially retired) and where we can identify who is the primary earner, in order to disentangle gender effects from primary earner effects. Because only employed individuals can make contributions to employer-based retirement accounts, the first restriction allows us to focus on those who may be making retirement contributions. This restriction excludes 2287 couples where both are retired or otherwise not working.[5]

We define the primary earner based on which spouse had higher earnings in the prior year. The RAND HRS earnings measure is based on total earnings in the previous year and is imputed if there is missing information. If only one spouse has earnings, that spouse is the primary earner. It is important to emphasize that this is not based on lifetime income differences; the person who is the primary earner at one point in time may not have been the primary earner for the majority of the couple's lives. This restriction excludes 2575 couples. However there is significant overlap in these two criteria for excluding couples from our sample. When both restrictions are applied we are left with 2807 couples. We further exclude 30 couples for whom at least one spouse reported making contributions to a DC account as a percent of income, but reported zero income for the previous year. Our sample includes 2777 couples.

Table 1 below describes our sample. Primary earners have slightly more years of education, are in better health, and are more likely to be men than non-primary earners.

[4] The HRS also contains information about married same-sex couples, however there are less than 20 such couples in the 2012 wave of the HRS, thus we have excluded them at this point from our analysis.

[5] We include in our sample individuals who described themselves as retired but who are currently working. The RAND HRS classifies these individuals as partially retired.

Table 1: Demographic Characteristics of HRS Sample

Characteristic	Husbands and Wives		Primary and Non-Primary Earners	
	Men	Women	Primary Earner	Non-Primary Earner
Age	61.2	58.3***	59.6	59.9***
Years of Education	13.4	13.5	13.6	13.3***
White	72.5%	72.8%	72.6%	72.6%
Black	15.9%	15.8%	15.9%	15.7%
Hispanic	14.8%	15.5%	15.0%	15.3%
Other	11.7%	11.5%	11.5%	11.6%
Self Reported Health (1=Excellent, 5=Very Poor)	2.61	2.54***	2.46	2.68***
Currently working	78.3%	73.1%*	95.6%	55.8%***
Retired	16.7%	14.3%**	2.3%	28.8%***
Earnings	$45,145	$30,279***	$61,312	$14,113***
Male	100.0%	0.0%***	57.6%	42.4%***
Primary Earner	57.6%	42.4%***	100.0%	0.0%***
N	2,777	2,777	2,777	2,777

Source: 2012 wave of HRS. Sample restricted to married, opposite-sex couples in which both members participated in HRS, and with at least one spouse who is currently working and for whom we can identify a primary earner.
Notes: *** p<0.01, ** p<0.05, * p<0.1

4.2 Survey of Consumer Finances Data

The SCF is a nationally representative sample of Americans across all age ranges. This survey is designed to paint a complete picture of the financial status of American households. Data are collected every three years, but households are not recontacted. We use the most recent wave of the SCF from 2013, which contains over 6,000 households. The SCF collects information about total assets, current contributions to employer-sponsored retirement plans, and plan characteristics, such as availability of employer match and options for investing. The SCF includes an oversample of wealthy households in order to provide better estimates of total wealth holdings.

A key strength of the SCF relative to the HRS is that it is representative of all ages. However there are limitations. As in the HRS, respondents may have limited information about plans that they do not participate in. In most households one respondent answers all questions but if the respondent does not answer questions about the spouse's employment and benefits, then the

spouse is asked to provide those responses. As such, the data may be subject to bias if the respondent is less aware of their spouse's accounts. In most cases (53 percent of our sample), the husband is the primary respondent and provides all information for the survey. In 10 percent of the sample, the husband is the primary respondent, but the wife provides information about her own employment and about existing employer based pensions. In 37 percent of cases, the wife is the primary respondent and provides all information for the survey. In 6 percent of cases, the wife is the primary respondent, but the husband provides information about his own employment. Regardless of who the primary respondent is, the other spouse provides information about their own employment in approximately 16 percent of cases. When looking at IRA accounts, information is not available in the survey about which spouse answers these questions. However these survey items are not included in the employment section of the survey, and therefore it is more likely that the primary respondent answers all questions. Because of this difference in data collection, employer-based plans are treated differently from non-employer-based plans in the survey, and thus, data across the two types of accounts may not be consistent.

The design of the SCF makes it very important to appropriately account for survey weights. First, the SCF oversamples the wealthy. As such without weights, data will be skewed towards higher values for all types of wealth including retirement assets. Second, the SCF public release data does not indicate when respondents replied "don't know" or refused to respond. Instead, missing data is imputed, with 5 values provided for each respondent. The SCF refers to these as 5 implicates per respondent. With these 5 implicates per respondent, there are a total of 30,075 observations for 6,015 respondents. We follow the recommendations of the SCF in calculating all summary statistics and regression results. For means and medians we use the provided survey weights and for regression results we use the Stata command *scfcombo* which simultaneously accounts for weighting due to oversampling and for the correlation across observations created by the imputation process.[6] Testing for statistically significant differences in means across groups in the SCF requires adjusting for weights and for the correlation between observations that occurs because of imputation. We have used an alternate strategy: using just one implicate per household along with the weights to test for statistical significance using a Wald test.

In our analyses we will focus on a restricted sample in which at least one spouse is currently working and where we can identify who is the primary earner, in order to disentangle gender effects from primary earner effects, as with the HRS. Because only employed individuals can make contributions to employer-based retirement accounts, the first restriction allows us to focus on those who may be making retirement contributions. After dropping unmarried and same-sex couples, these restrictions exclude 4,202 observations: 3,932 where neither spouse works or

[6] Further documentation is available at http://www.federalreserve.gov/econresdata/scf/files/codebk2013.txt and http://www.federalreserve.gov/Standard_Error_Documentation.pdf

neither reports earnings, and 270 where a primary earner can not be identified because both spouses have the same earnings. This leaves us with a sample of 12,103 observations.

Because there are multiple implicates per respondent, the sample of 12,103 observations represents data from 2,426 respondents. Note that for some observations the earnings of one or both spouses may be imputed. This could cause some implicates for a household to be dropped due to our sample restrictions, while other implicates are not dropped. For 99.3 percent of couples in our data, all five implicates are included. Similarly, within the set of implicates for a given household, there may be differences on both the intensive and extensive margin, for example how much one contributes and whether or not they contribute. In what follows we list the number if implicates included in the analysis, which is roughly equivalent to five times the number of unique respondents.

Table 2 below describes our sample.

Table 2: Demographic Characteristics of SCF Sample

Characteristic	All Ages		Age 50 plus		All Ages	
	Husbands and Wives		Husbands and Wives		Primary and Non-Primary Earners	
	Men	Women	Men	Women	Primary Earner	Non-Primary Earner
Age	47.9	45.5***	58.8	55.9***	47.0	46.4
Years of Education	13.9	14.1*	13.9	14.0	14.2	13.8***
Self Reported Health (1=Excellent, 4= Poor)	1.94	1.9*	2.04	1.93***	1.87	1.96***
Currently working	88.7%	69.8%***	81.5%	70.0%***	100.0%	58.5%***
Retired	6.3%	4.0%***	12.8%	8.3%***	0.0%	10.4%***
Earnings	$70,128	$31,485***	$70,227	$31,083***	$81,757	$19,856***
Male	100%	0.00%***	100%	0.00%***	68.8%	31.2%***
Primary Earner	68.8%	31.2%***	64.7%	35.3%***	100.0%	0.0%***
N	12,103	12,103	6,659	6,659	12,103	12,103

Source: 2013 wave of SCF. Sample restricted to married, opposite-sex couples with at least one spouse who is currently working and for whom we can identify a primary earner.

4.3 RAND American Life Panel Data

The ALP is a nationally representative internet survey panel administered by RAND. Respondents who do not already have access to computers or the internet are provided with laptops and access to the internet to ensure the panel is representative. Panel members take part in several surveys a month. In addition to responding to surveys on a wide variety of topics, the

HRS survey modules have been fielded to the ALP panel members. One key difference is that for a subset of households in the ALP, each spouse was asked questions about IRAs and Keoghs for themselves and for their spouse. This provides us an opportunity to validate the reliability of responses when one spouse is asked to provide information on the other spouse's retirement accounts. A key limitation of the ALP is the sample size, with approximately 5,500 total respondents, and less than 500 households where both spouses answered the HRS battery of questions.

Table 3: Demographic Characteristics of ALP Sample

Characteristic	Husbands and Wives	
	Men	Women
Age	47.5	45.7***
Years of Education	14.0	14.0
White	87.4%	87.2%
Black	4.5%	4.1%
Hispanic	8.3%	10.0%
Other	8.1%	8.8%
Currently working	70.1%	51.3%***
Earnings	$55,766	$20,034**
Male	100%	0%***
Primary Earner	55.1%	27.8%***
N	468	468

Source: RAND ALP. Sample restricted to married, opposite-sex couples with at least one spouse who is currently working and for whom we can identify a primary earner.

5. Employer-provided Retirement Plans

In what follows we compare contributions, account balances, and account characteristics for opposite-sex married couples. In the HRS, each member of the household is asked about his or her own employment-based retirement accounts for both his or her current job and past jobs. Respondents are asked to report up to ten different retirement accounts, including both DC and defined benefit (DB) plans. We aggregate contributions and balances across a respondent's employer-sponsored DC retirement accounts. Few respondents are contributing to more than one account, but holding balances in multiple accounts is not uncommon. In the SCF,

respondents provide information about their own and, in most cases, their spouse's employment-based retirement accounts for their current job and past jobs. For the current primary job, the respondent can report on two accounts for each spouse. For previous jobs, respondents are asked to report on up to four pensions total for the couple. As with the HRS, we aggregate contributions and balances across each spouse's employer sponsored DC retirement accounts.

5.1 Descriptive Results

Current Contributions of Couples

Using the HRS sample and the SCF sample, we begin by examining the current contributions to each spouse's DC account for both husbands and wives as well as for primary and secondary earners. Table 4 shows that husbands and wives in the HRS are similarly likely be eligible for and to make contributions to their DC accounts (approximately 26 percent), but husbands in the SCF are more likely than their wives, and more likely than HRS respondents, to be eligible for and make contributions to their DC accounts. This is true whether we look at the entire age range of SCF (39 percent of husbands make contributions compared to 27 percent of wives), or just SCF respondents who are the same age as HRS respondents (36 percent of husbands make contributions compared to 27 percent of wives).

For both surveys, husbands contribute more as a dollar amount to their accounts than wives and this holds whether we look at the overall mean of contributions, including zeros for those who do not contribute, or the mean conditional on making a contribution. Median contributions conditional on making a contribution are also higher for husbands than for wives. Unconditional median contributions are the same for husbands and wives because more than half of observations in both surveys make no contribution, thus the median contribution is zero. Contributions as a percent of pay are much closer for husbands and wives. It is important to note that husbands in both samples tend to be older and so there may be a benefit to putting more in their accounts, since couples can access it earlier. The bottom half of Table 4 examines employer contributions to spouses' retirement accounts. The likelihood of receiving an employer contribution is similar for husbands and wives in the HRS, but the likelihood of receiving an employer contribution is almost four times as likely for husbands than as for wives in the SCF. However, conditional on having an employer contribution, employer contribution amounts are much closer between husbands and wives in the SCF than between husbands and wives in the SCF. Respondents in the HRS report higher employer contributions as a percentage of pay than in the SCF; this may be driven by outliers who report very high contributions.

The final row of the table shows the share of contributions made by the employer to each spouse's account. As an example, for husbands, this is calculated by taking employer contributions to the husband's account and dividing by the sum of employer and employee contributions to the husband's account. We see that in the HRS, employer contributions make

up approximately 43 percent of overall contributions to an individual's account, both husbands and wives. In the SCF, employer contributions make up approximately 35 percent of overall contributions to an individual's account.

When we compare primary and secondary earners (Table 5) we see that primary earners are much more likely than secondary earners to be eligible for and making contributions to DC accounts. In the HRS, 38 percent of primary earners contribute to their DC account whereas 14 percent of secondary earners contribute. In the SCF, 47 percent of primary earners and 46 percent of primary earners for observations from a household with at least one spouse over 50 contribute to their DC accounts. Only 20 percent of secondary earners of all ages and 17 percent of secondary earners for observations from households with a spouse over 50 contribute. Conditional on making a contribution, contribution amounts are higher for primary compared to secondary earners. Employer contributions are much more likely for primary earners relative to secondary earners, especially for SCF observations. This is in part driven by the fact that a large share of secondary earners has no labor earnings.

Table 4: Comparison of Husbands' and Wives' Contributions to DC Accounts in Households

	HRS Sample				SCF Sample, All Ages				SCF Sample, Ages 50+			
	Husbands		Wives		Husbands		Wives		Husbands		Wives	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Eligible for DC plan	40.0%	0.0%	37.9%	0.0%	52.3%	100.0%	35.3%***	0.0%	50.2%	100.0%	34.0%***	0.0%
Makes any contribution to a DC account	26.2%	0.0%	25.8%	0.0%	39.1%	0.0%	27.4%***	0.0%	36.2%	0.0%	26.9%***	0.0%
Annual amount contributed	$1,951	$0	$1,091***	$0	$3,113	$0	$1,423***	$0	$3,376	$0	$1,594***	$0
Contribution as percent of pay	2.8%	0.0%	2.5%	0.0%	2.8%	0.0%	2.0%***	0.0%	2.9%	0.0%	2.1%***	0.0%
Conditional on making a contribution:												
Annual amount contributed	$7,445	$3,735	$4,234***	$1,845	$8,099	$4,200	$5,227***	$2,880	$9,608	$5,160	$5,984***	$2,760
Contribution as percent of pay	10.9%	7.0%	9.7%	6.0%	7.4%	6.0%	7.2%	6.0%	8.3%	7.0%	7.9%	6.0%
Receives an employer contribution	24.1%	0.0%	22.5%	0.0%	33.2%	100.0%	22.6%***	0.0%	30.3%	100.0%	21.9%***	0.0%
Annual employer contribution	$1,789	$0	$892***	$0	$1,715	$0	$682***	$0	$1,646	$0	$715***	$0
Employer contribution as percent of pay	2.0%	0.0%	1.7%*	0.0%	1.5%	0.0%	1.1%***	0.0%	1.4%	0.0%	1.1%**	0.0%
Conditional on employer making a contribution:												
Annual employer contribution	$7,438	$3,000	$3,970***	$1,885	$5,410	$2,880	$3,084***	$2,040	$5,723	$3,120	$3,359***	$2,040
Employer contribution as percent of pay	8.4%	5.0%	7.4%*	5.0%	4.7%	4.0%	4.9%	4.0%	4.9%	4.0%	5.1%	4.0%
Conditional on employee or employer making a contribution:												
Employer contribution as share of total contributions	43.3%	42.9%	42.7%	44.4%	35.2%	34.0%	35.4%	34.5%	33.6%	33.1%	34.3%	33.3%
Number of Observations	2,786		2,786		12,103		12,103		6,659		6,659	

Notes: We indicate rejection of a two-sided t-test of equality of husband's mean and wife's mean at the 1% (***), 5% (**), and 10% (*) levels.

Table 5: Comparison of Primary Earners' and Secondary Earners' Contributions to DC Accounts in Households

	HRS Sample				SCF Sample, All Ages				SCF Sample, Ages 50+			
	Primary Earner		Secondary Earner		Primary Earner		Secondary Earner		Primary Earner		Secondary Earner	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Eligible for DC plan	56.1%	100.0%	21.9%***	0.0%	60.3%	100.0%	27.3%***	0.0%	59.9%	100.0%	24.4%***	0.0%
Makes any contribution to a DC account	38.3%	0.0%	13.6%***	0.0%	47.1%	0.0%	19.5%***	0.0%	46.0%	0.0%	17.1%***	0.0%
Annual amount contributed	$2,558	$0	$484***	$0	$3,592	$0	$944***	$0	$4,050	$0	$920***	$0
Contribution as percent of pay	3.9%	0.0%	1.4%***	0.0%	3.4%	0.0%	1.4%***	0.0%	3.6%	0.0%	1.4%***	0.0%
Conditional on making a contribution:												
Annual amount contributed	$6,672	$3,130	$3,550***	$1,740	$7,763	$4,440	$4,869***	$2,400	$9,039	$5,040	$5,422***	$2,400
Contribution as percent of pay	10.2%	6.5%	10.5%	6.0%	7.3%	6.0%	7.4%	6.0%	8.1%	6.0%	8.3%	6.0%
Receive an employer contribution	34.2%	0.0%	12.4%***	0.0%	40.4%	100.0%	15.5%***	0.0%	39.1%	100.0%	13.1%***	0.0%
Annual employer contribution	$2,279	$0	$402***	$0	$1,962	$0	$435***	$0	$1,966	$0	$393***	$0
Employer contribution as percent of pay	2.8%	0.0%	0.9%***	0.0%	1.8%	0.0%	0.8%***	0.0%	1.8%	0.0%	0.7%***	0.0%
Conditional on employer making a contribution:												
Annual employer contribution	$6,669	$2,790	$3,254***	$1,500	$5,054	$2,760	$2,897***	$1,680	$5,266	$3,000	$3,091***	$1,680
Employer contribution as percent of pay	8.1%	5.0%	7.4%	4.8%	4.7%	4.0%	5.2%	4.0%	4.9%	4.0%	5.4%	4.0%
Conditional on employee or employer making a contribution:												
Employer contribution as share of total contributions	42.9%	42.9%	43.3%	44.8%	35.6%	34.1%	34.4%	34.1%	34.6%	33.3%	31.9%	31.0%
Number of Observations	2,786		2,786		12,103		12,103		6,659		6,659	

Notes: We indicate rejection of a two-sided t-test of equality of PE's mean and SE's mean at the 1% (***), 5% (**), and 10% (*) levels.

Figure 1 shows the mean share of household contributions made to each spouse's employer-sponsored retirement account for households where at least one spouse reported making a contribution. Employee contributions made to the husband's account are approximately 52 percent of the total household contributions that a couple in the HRS makes to their employer-sponsored DC accounts, based on 1,226 households where at least one spouse reports a contribution. The differential between husbands' contributions and wives' contributions is smaller in the HRS than in the SCF, regardless of whether we look at SCF observations of all ages, or only SCF couples in which at least one spouse is age 50 or older. In the SCF, 6,303 implicates at all ages and 3,420 over age 50 have at least one spouse reporting a contribution. But when we turn to the primary and secondary earners analysis in Figure 2, we see that approximately 80 percent of household contributions are made into the primary earners' accounts across both surveys.

Figure 1: Mean Share of Contributions Attributed to Each Spouse, Husbands and Wives

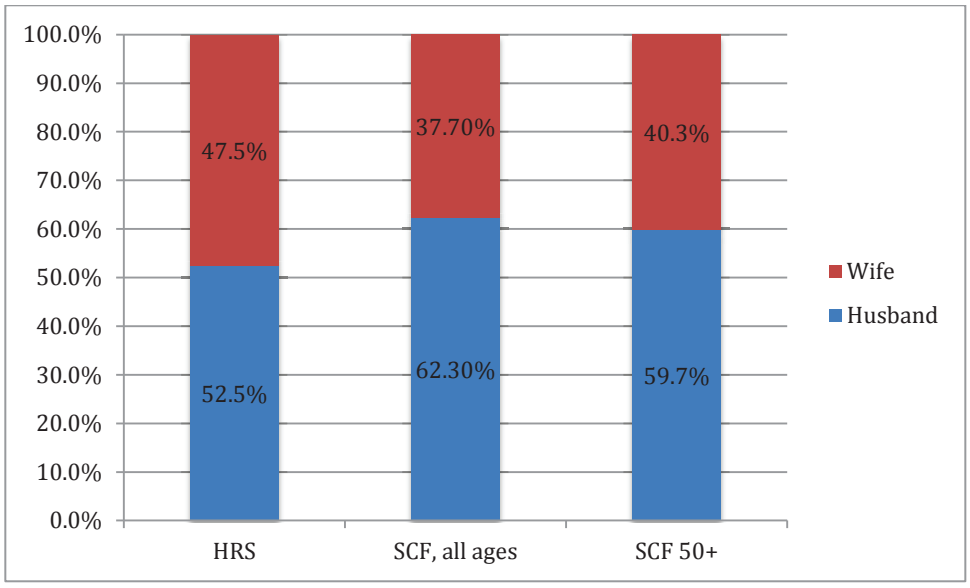
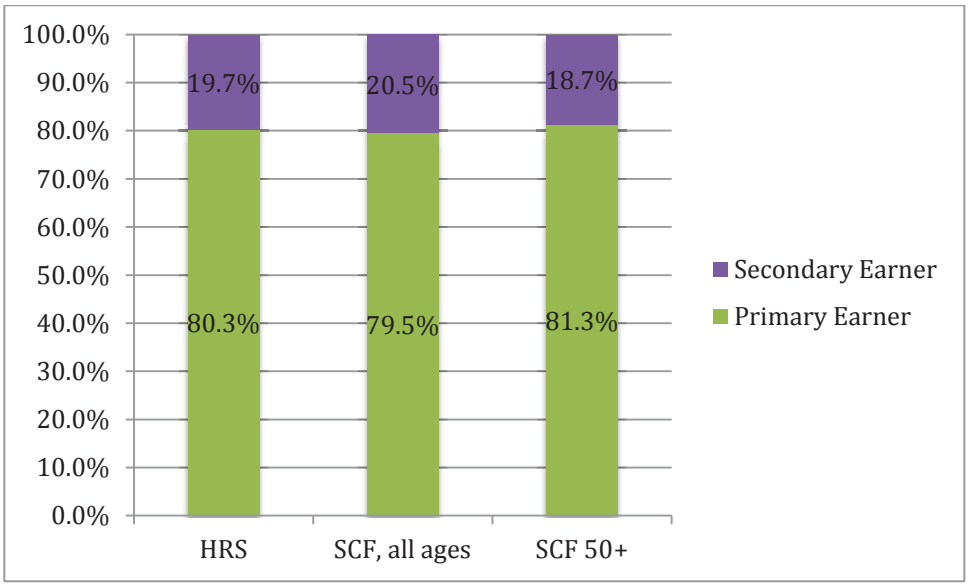


Figure 2: Mean Share of Contributions Attributed to Each Spouse, Primary Earners and Secondary Earners



Accumulated Balances

Given that husbands and primary earners tend to make larger contributions, it is not surprising that we find that husbands and primary earners also have higher total accumulated account balances. In Table 6 we examine account balances for the sample of households that are currently working and where we can identify the primary earner. Husbands and wives in the HRS are similarly likely to hold accounts, with approximately 42 percent holding accounts, but husbands in the SCF, from households of all ages as well as households with at least one spouse older than 50 years, are much more likely than wives to hold a DC account. Primary earners from both surveys are much more likely to have a DC account.

Husbands have larger account balances than wives, and primary earners have larger account balances than secondary earners, regardless of whether we consider unconditional account balances, or account balances conditional on having a non-zero balance. Conditional on a non-zero balance, mean account balances are much larger than median account balances indicating a highly right-skewed distribution. We also find that husbands and primary earners are more likely to have access to DB pension plans.

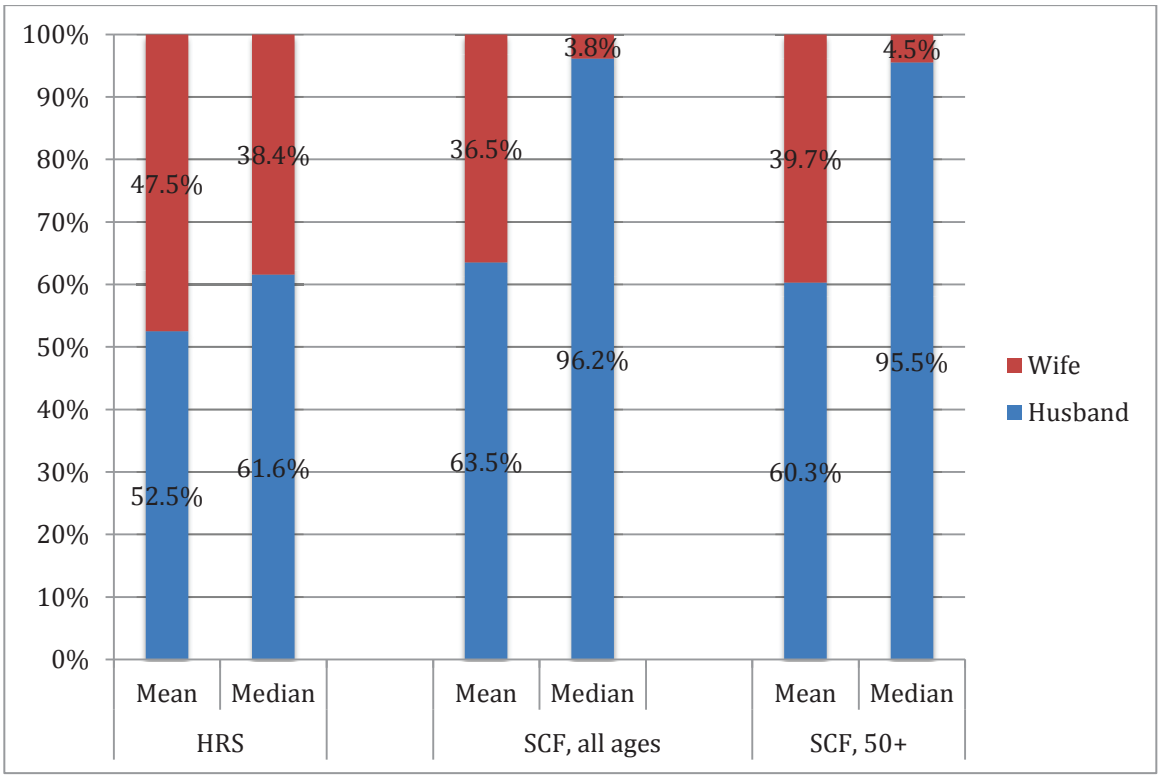
Table 6: Retirement Accounts in Households

	HRS Sample				SCF Sample, All Ages				SCF Sample, Ages 50+			
	Husbands		Wives		Husbands		Wives		Husbands		Wives	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any reported DC balance	41.9%	0.0%	42.4%	0.0%	41.4%	0.0%	28.8***%	0.0%	37.7%	0.0%	28.5%***	0.0%
Total balance across all DC accounts	$70,717	$0	$42,743***	$0	$59,369	$0	$24,955***	$0	$81,559	$0	$37,373***	$0
Total DC balance conditional on positive DC balance	$169,842	$70,500	$100,917***	$37,000	$143,233	$50,000	$86,533***	$30,000	$216,363	$99,000	$131,305***	$49,000
Share with a DB plan	8.5%	0.0%	4.8%***	0.0%	16.9%	0.0%	12.5%***	0.0%	19.0%	0.0%	15.0%**	0.0%
	Primary Earners		Secondary Earners		Primary Earners		Secondary Earners		Primary Earners		Secondary Earners	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any reported DC balance	55.0%	100.0%	29.3%***	0.0%	48.8%	0.0%	21.5%***	0.0%	47.7%	0.0%	18.5%***	0.0%
Total balance across all DC accounts	$84,798	$5,000	$28,662***	$0	$65,388	$0	$18,936***	$0	$93,507	$0	$25,425***	$0
Total DC balance conditional on positive DC balance	$154,713	$62,000	$98,219***	$35,000	$134,047	$50,000	$88,040***	$29,000	$196,208	$80,000	$137,423**	$45,000
Share with a DB plan	8.1%	0.0%	5.3%***	0.0%	20.5%	0.0%	9.0%***	0.0%	24.2%	0.0%	9.7%***	0.0%
Number of Observations	2,786	-	2,786	-	12103	-	12103	-	6659	-	6659	-

Notes: We indicate rejection of a two-sided t-test of equality of husband's (or PE's) mean and wife's (or SE's) mean at the 1% (***), 5% (**), and 10% (*) levels.

Figure 3 examines the share of defined contribution assets held by husbands compared to wives, for households that hold any assets. In the HRS, at the mean, husbands hold a slightly larger share of DC assets (53 percent compared to 47 percent), and at the median, husbands hold an even larger share (62 percent), based on 1,778 households where at least one spouse reports an account. This may be optimal since husbands in our sample tend to be slightly older than their wives, and holding assets in the account of the older spouse would allow couples to access their money earlier. In the SCF, husbands hold a larger share of assets at the mean (64 percent) than in the HRS, and this also holds when we focus on the older cohort of the SCF (holding 60 percent of household assets), based on 6,786 implicates among all ages and 3,737 among those over 50 in SCF. In the SCF, many more husbands hold all of the household's DC assets, leading to a much higher median relative to the HRS.

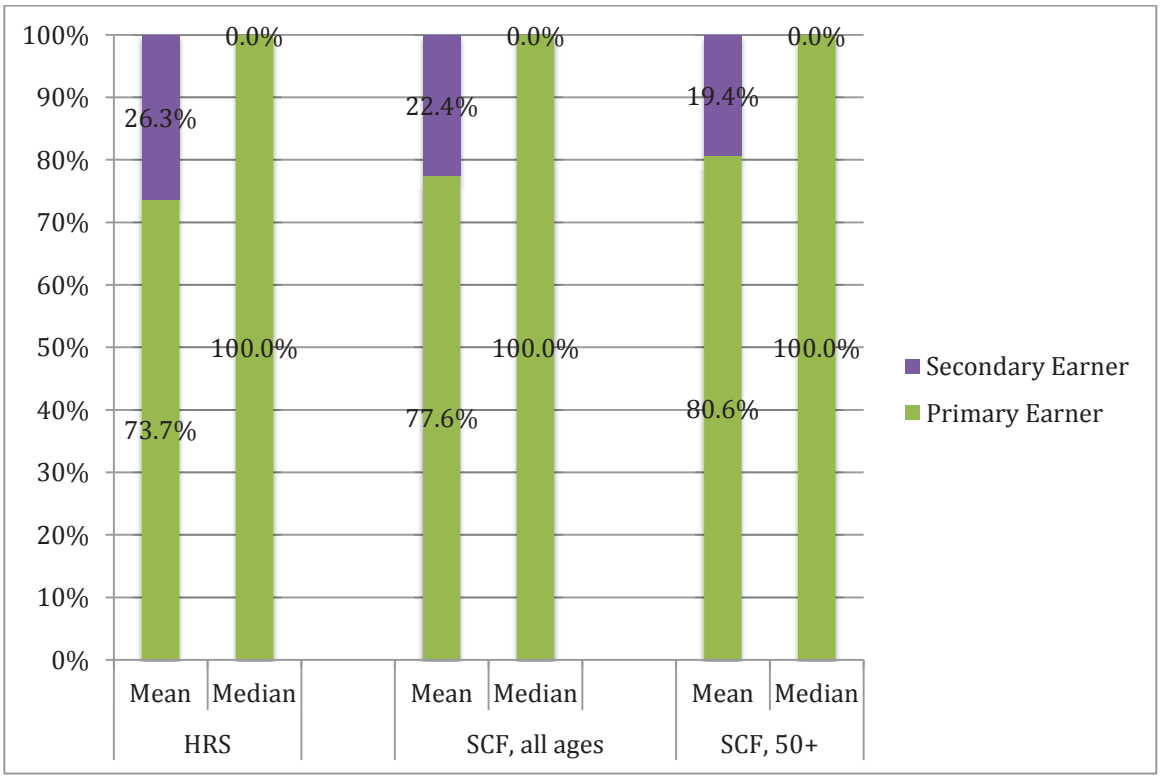
Figure 3: Share of Household DC Assets Attributed to Each Spouse, Husbands and Wives



When we compare retirement assets of primary earners to those of secondary earners (Figure 4), we see that a much larger share of household retirement assets is held by the primary earners. At the mean, 74 percent of household DC assets are held by the primary earner in HRS respondent households, 78 percent are held by the primary earner in SCF households of all ages, and 81 percent are held by the primary earner in SCF households that have at least one spouse over age 50. At the median, the primary earner holds 100 percent of household DC assets, which occurs

because for over 50 percent of couples with any balance, that balance is held entirely by the primary earner.

Figure 4: Share of Household DC Assets Attributed to Each Spouse, Primary Earners and Secondary Earners



Differences across households

In this subsection we focus only on households who report making contributions to their DC retirement accounts. This allows us to investigate heterogeneities in households' division of contributions and assets among those households making contributions. To illustrate what we mean by heterogeneities in division of contributions and assets, consider our finding in Figure 1 in which, on average in the HRS, the husband's DC plan contributions are 52 percent of the household's annual contributions. Multiple scenarios could lead to this statistic. At one extreme, in every household in the HRS, husbands could contribute 52 percent of the household's annual contributions to their DC accounts and wives could contribute 48 percent of the household's annual contributions to their DC accounts. At the other extreme, 52 percent of HRS respondent households could contribute only to the husband's account and 48 percent could contribute only to the wife's account. These different scenarios describe very different strategies for how households locate their retirement savings.

In fact, of the 1220 HRS respondent households that report making DC account contributions, very few households (222) have both husbands and wives making contributions. It is more likely that these households are contributing to only the husband's account (506

households) or only the wife's account (498 households). In the SCF, of the 6,397 observations that report making DC account contributions, many more report that only the husband makes contributions (3,293), while fewer observations (1,620) have both husbands and wives making contributions or contribute only the wife's account (1,502 observations). Figures 5 and 6 plot the distribution of the share of contributions made to the husband's account. These pictures illustrate the large share who contribute to only one account, but also highlight that that the distribution of the share of contributions among household where both are contributing is disperse, with only small increases at the 50 percent mark. In both datasets, only a very small fraction of households are making equal contributions to the husband's and wife's account, and that includes households where both are making the maximum allowed contribution. When we look at households in which both spouses report that they are eligible to participate in an employer-sponsored DC plan, we see the same pattern of behavior: most households contribute to only one spouse's account (not pictured).

Figure 5: Histogram of Share of Contributions to the Husband's Account: HRS

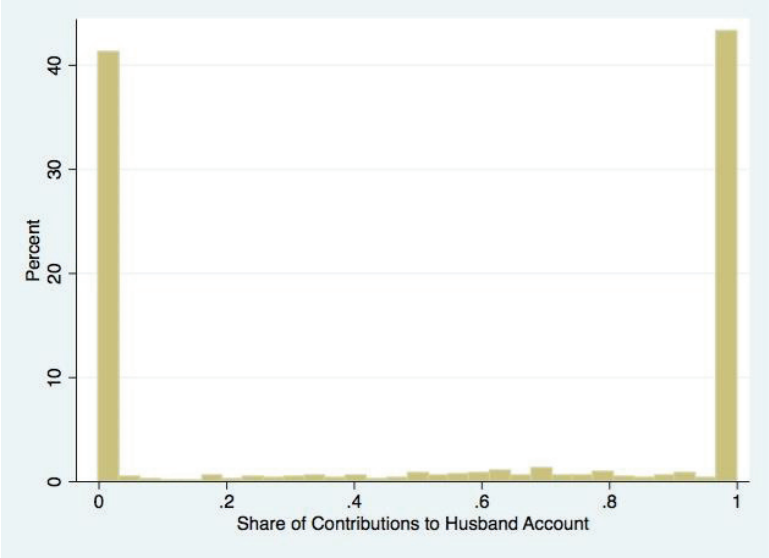
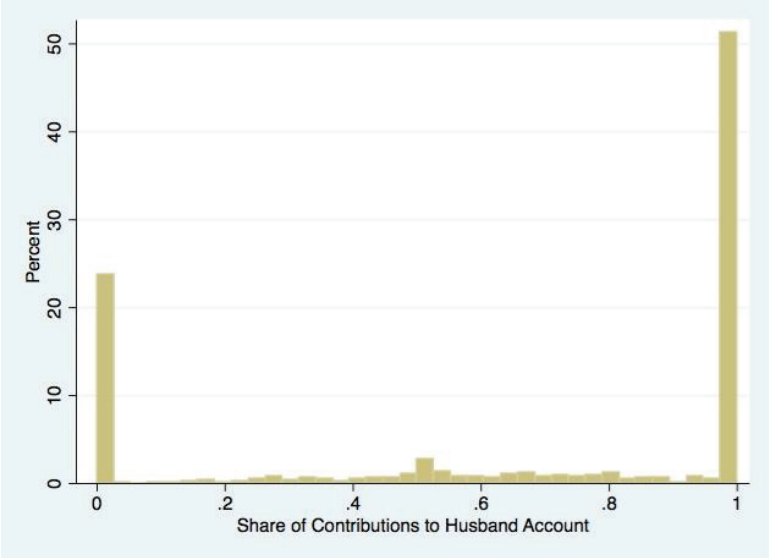


Figure 6: Histogram of Share of Contributions to the Husband's Account: SCF



In the following figures, we look at households where contributions are only made to the husband's account, where contributions are only made to the wife's account, and households where contributions are made to both accounts. As shown in Figure 7, when contributions are only made to the husband's account, the mean contributions are much higher in absolute amounts than when contributions are only made to the wife's account, across both surveys, although the contributions as a percent of pay are only slightly higher for husbands than for wives (see Table A1 in the Appendix). Furthermore, as shown in Figure 8, total balances held are much smaller when only the wife contributes. The share of non-contributing spouses who hold any balances is small and on average the balances are less than $30,000 for both noncontributing husbands and noncontributing wives.

On the other hand, when we look at households where both contribute, we see that the dollar amount of contributions and account balances are still larger for husbands than for wives. Taken all together, these results suggest that the previous analysis masks heterogeneity in the location of contributions and account balances. Most households who make any contribution contribute to only one spouse's account, and it is more common to contribute to the husband's account only than the wife's account only. With our data we can not separately identify whether this is due to preference or differential access to DC accounts. As discussed previously, measuring DC plan eligibility in surveys can be unreliable. Contributions and balance sizes are much larger when households contribute to the husband's account only rather than the wife's account only. In households in which both spouses contribute, contributions and balance sizes are larger for husbands' accounts than for wives' accounts. Couples where only wives contribute are likely to have fewer assets to draw on in retirement than couples where only the husband contributes or both spouses contribute.

Similar results are obtained if we focus on medians or on those households in the SCF who are eligible for the HRS based on their age.

Figure 7: DC Contributions in Households who Make DC Contributions

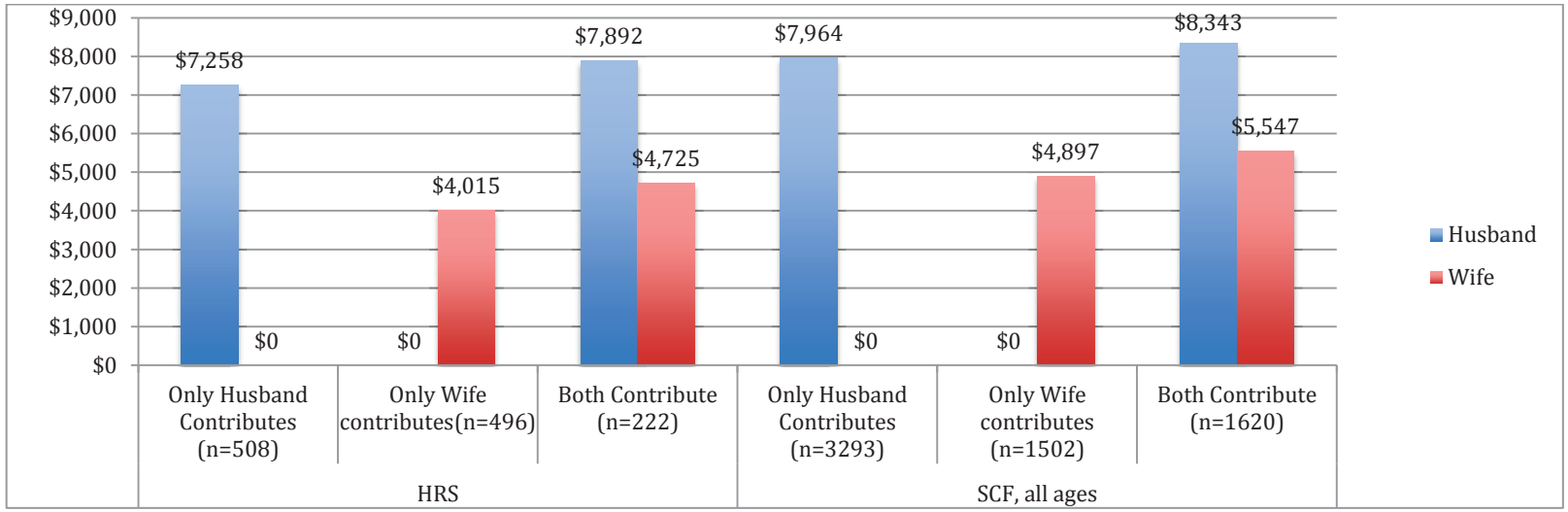
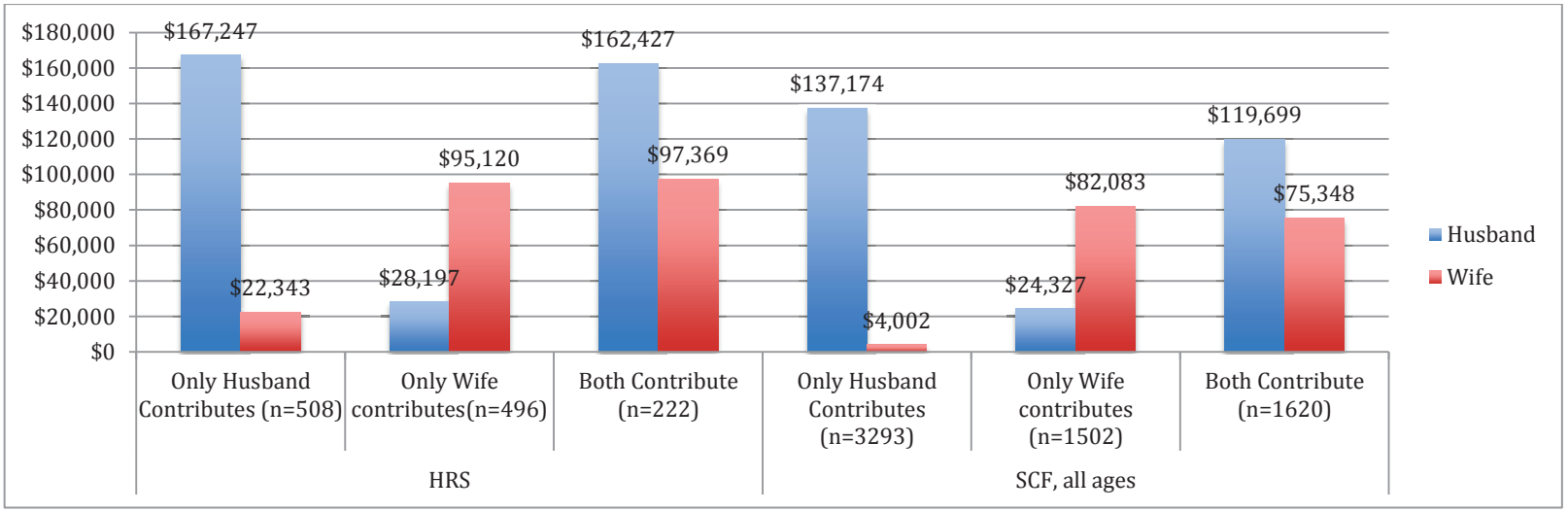


Figure 8: DC Account Balances among Households who Make DC Contributions



Robustness

For many people, contributions to employer-sponsored retirement accounts are selected at the time of hire and rarely changed. This may make it difficult for respondents to remember how much they, or their employer, are contributing to their retirement account, leading them to respond that they don't know what their balance is. The SCF uses imputations to address this issue. However, when HRS respondents answer "Don't Know," to questions about DC plan contributions or account balances, the HRS uses an unfolding bracket mechanism to help respondents provide a range in which their contribution or account balance may fall.[7] Even with these unfolding brackets, some respondents are unable to narrow down their retirement contribution amounts. 330 couples have at least one question where a spouse reports that they do not know the amount of their own or their employer's contribution. In the previous analyses, we treat these contribution amounts as zero. Alternatively we could drop these responses from the sample. As a check of robustness of our results, we conduct the same descriptive analysis, except that we drop respondents who report "Don't Know" to the retirement contribution questions and find that dropping these respondents would not change the qualitative interpretation of our results (see Table A2 in the Appendix).

In addition to the analyses that compare husbands to wives or primary to secondary earners, we also examined retirement contributions and assets held by HRS "financial respondents." In the HRS, one member of the household identifies himself or herself as the household's "financial respondent," the one who is more responsible for financial matters in the household. In the HRS, only the financial respondents provide information about certain financial questions, such as household non-retirement wealth. Each respondent in the HRS answers questions about their own employer based DC plans. Table A3 in the Appendix compares contributions and balances for financial and non-financial respondents. We see that like primary and secondary earners, there are larger differences in the contributions and assets of financial respondents relative to non-financial respondents than the differences for husbands and wives. However, financial respondents are not randomly selected, thus differences between financial respondents and non-financial respondent may be due to differences in each spouse's interest in financial topics. The SCF does not designate one respondent as the financial respondent, thus we do not conduct the same analysis in that sample.

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[7] With the unfolding brackets, respondents are asked if the unknown amount is higher or lower than some specific amount, for example 5 percent or $5,000, depending on the question. Respondents who say lower are then asked if it is higher or lower than a smaller amount, for example 2 percent or $2,000. Respondents who say higher are then asked if it is higher or lower than a larger amount, for example 10% or $10,000. This continues until the respondent's answer can be narrowed down to a smaller range, or until they reach zero or maximum amount.

5.2 Regression Analysis

Up until this point, we have been focusing on the descriptive analysis. We find that husbands contribute more to their employer-sponsored retirement accounts than their wives do, and husbands have larger account balances than their wives' retirement account balances. We also find that most households who make any contribution to employer-sponsored retirement accounts tend to contribute to only one spouse's account, and it is more common to contribute to the husband's account only than the wife's account only.

There are a number of factors that might impact contributing to the accounts of husbands over the accounts of wives. In order to investigate this further, we use multiple regression analysis, which allows us to control for other factors that may differ between husbands and wives and might factor in to contribution differences.

Model specification

We use regression analysis to identify what factors predict which spouse has higher accumulated assets or a higher current contribution rates in employer-based accounts for all three datasets. Multiple regression analysis allows us to investigate whether retirement savings are located differently controlling for a variety of factors. In particular we estimate the following equation:

$$Y_i = f(\alpha + \beta_{1,i}X_i + \beta_{1,j}X_j + \beta_2 agediff + \beta_{3,i}age_i + \beta_{4,i}age59_i + \beta_{4,j}age59_j + \beta_{5,i}income_i + \beta_{5,j}income_j + \beta_{6,i}anymatch_i + \beta_{6,j}anymatch_j + \beta_{7,i}matchamount_i + \beta_{7,j}matchamount_j + \beta_{8,i}planchars_i + \beta_{8,j}planchars_j)$$

Where Y_i is a dummy variable indicating that spouse *i* has higher current contributions. In the analysis reported here we focus on the case where spouse *i* is the husband and spouse j is the wife. In an alternate specification, we replace Y_i with the share of contributions. Because these dependent variables focus on the share of contributions, we limit our sample to households where at least one spouse contributes. We control for characteristics of each spouse, X_i and X_j, such as defined benefit assets, education, whether they are collecting social security, job tenure, and, in the HRS only, total household debt.

Our primary explanatory variables of interest in these regressions will be those which create incentives for households to save first in a particular spouse's account. We will control for the age of the husband (age_i) as well as the difference in ages between the spouses (*diffage*). We also include indicators if the husband or wife is greater than 59½. If couples are responding to incentives we would expect to see larger contributions in the accounts of the older spouse, since those assets can be withdrawn earlier, allowing for greater flexibility to access these assets. Additionally, we control for the income of each spouse. If one spouse earns slightly more than the other spouse, we wouldn't necessarily expect that to affect the location of funds. However, if one spouse earns less than the total desired savings for the household, or if the household wants to save more than the maximum allowed for one person, then the household would not be able to

locate all retirement savings in that person's account. We also control for each spouse's reported eligibility to participate in DC plans through an employer.

We will also include plan characteristics that might influence the most favorable location for funds. First, we will include an indicator for whether the current employer offers a matching contribution, $anymatch_i$ and $anymatch_j$, as well as the employer match amount for each spouse, $matchamount_i$ and $matchtamount_j$. If couples are responding to incentives in a way that is consistent with optimal behavior we would expect the share of contributions to the husband to be higher as his employer match increases. Information about the match is only available in the SCF. Where possible we will control for other plan characteristics ($planchars_i$ and $planchars_j$). In both the HRS and the SCF we are able to control for whether or not individuals have choice in how funds are invested. In the HRS we control for auto-enrollment.

Regression results

Table 7 and Table 8 present the regression results for both the HRS and the SCF. In columns 1 and 3 of both tables, the dependent variable is an indicator variable for whether the household is one in which the husband contributes more than the wife. In columns 2 and 4, the dependent variable is the share of contributions made to the husband's account. Columns 1 and 2 of both tables report regression results with the sample of households in which at least one spouse reports making a contribution to a DC plan, and Columns 3 and 4 report results using only a sample in which both spouses report eligibility to participate in an employer-sponsored DC plan. We use a linear probability regression model. Because the dependent variables are defined to compare contributions between husbands and wives, for any variable for the husband expected to have a positive coefficient, we would expect that the equivalent variable for the wife would have a negative coefficient.

We find that the share of income earned by the husband has a large and significant impact on whether the husband contributes more than the wife to employer-based retirement accounts. In the HRS, a 10 percentage point increase in the share of income attributed to the husband increases the probability that he makes the larger share of contributions by 1.99 percentage points; in the SCF, a 10 percentage point increase in the share of income attributed to the husband increases the probability that he makes the larger share of contributions by 6.12 percentage points. In columns 2 and 4, the dependent variable is the share of contributions made to the husband's account. These are estimated with an ordinary least squares regression model. Again, the share of income earned by the husband is the most significant predictor. In the HRS, a 10 percentage point increase in the share of income attributed to the husband increases the share of contributions made to the husband's account by 1.67 percentage points; in the SCF, a 10 percentage point increase in the share of income attributed to the husband increases the share of contributions made to the husband's account by 4.23 percentage points. While we find no impact of the magnitude of each spouse's income, indicators for whether each spouse works are associated with whether the husband contributes more and the share of contributions to the

husband. These indicators allow us to control for cases where one spouse does not work, where contributions can only be made to the account of the working spouse. Strangely, these indicators suggest that husbands contribute less when the husband works.

We find that when the husband is reportedly eligible to participate in an employer-sponsored DC plan, the probability that he makes the larger contribution increases by 50.2 percentage points in the HRS and by 44.6 percentage points in the SCF. Reported eligibility increases the share contributed to the husband by 46.6 percentage points in the HRS and 43.4 percentage points in the SCF. Interestingly the magnitudes for each of these variables are smaller for the wives, suggesting a stronger tendency towards locating assets in the husbands account.

We hypothesized that age differences between husbands and wives might also impact how they locate retirement resources, since assets held by the older spouse can be accessed earlier. We find no evidence that the households are responding in this way. If anything, in the HRS husbands who are older than their wives are more likely to contribute the smaller share (although the significance of this finding is not robust across the two datasets, including when we limit the SCF to HRS age eligible couples.).

We do not find significant constant terms in most of these regressions, suggesting that differences in contributions to husbands' and wives' accounts are not driven by gender differences, rather by other differences that are associated with gender, such as differences income.

Our regressions contain a number of additional controls that might influence the location of contributions within households if households are not treating assets as joint household assets. In the SCF, when the husband is the respondent, contributions to the husband's accounts are larger. This could occur because the financial respondent is more interested and more knowledgeable about contributions or because the financial respondent actually makes larger contributions. We also find that job tenure increases contributions. When the husband holds a GED or has less than a high school education, he is more likely to make smaller contributions relative to his wife, suggesting that even after controlling for income, education is associated with contributions. Finally in the SCF we find that spouses who have a DB plan also make larger contributions, perhaps because those who have a DB plan may see DB and DC plans as complements rather than substitutes.

Columns 3 and 4 of Tables 7 and 8 restrict the sample to households where both spouses report they are eligible to participate in an employer-sponsored DC plan. In these regressions we find that the share of income earned by the husband plays the largest role in predicting the location of assets, and the coefficients on this variable increase significantly over those reported in columns 1 and 2. While the sample size drops dramatically, these results do suggest that income influences location independent of eligibility. A 10 percentage point increase in the share of income earned by the husband increase the probability that the larger share of contributions is made to his account by 7.64 percentage points in the HRS and by 12.19 percentage points in the SCF. A 10 percentage point increase in the share of income earned by

the husband increase share of contributions is made to his account by 5.94 percentage points in the HRS and by 8.88 percentage points in the SCF.

Table 7: Regression Analysis: The Share of Current Contributions, HRS

	HRS		HRS, Both Spouses Eligible for DC	
	Husband has larger contributions	Share of contributions to Husbands acct	Husband has larger contributions	Share of contributions to Husbands acct
Age Difference	-0.004**	-0.003*	-0.014**	-0.009*
	[0.002]	[0.002]	[0.006]	[0.005]
Husband Age	0.002	0.001	-0.000	-0.002
	[0.003]	[0.002]	[0.010]	[0.008]
Indicator if Husband over 59 & half	0.009	0.007	0.071	0.058
	[0.026]	[0.021]	[0.090]	[0.070]
Indicator if Wife over 59 & half	-0.052*	-0.048**	-0.163*	-0.153**
	[0.028]	[0.022]	[0.092]	[0.072]
Husband's share of income	0.199***	0.167***	0.764***	0.594***
	[0.044]	[0.035]	[0.193]	[0.150]
Husband's Income in 1000's	0.000	0.000	-0.000	0.000
	[0.000]	[0.000]	[0.000]	[0.000]
Wife's Income in 1000's	-0.000	-0.000	0.000	-0.000
	[0.000]	[0.000]	[0.001]	[0.001]
Husband has DB plan	-0.011	-0.004	-0.011	0.005
	[0.027]	[0.022]	[0.084]	[0.065]
Wife has DB plan	-0.015	-0.012	-0.065	-0.045
	[0.035]	[0.028]	[0.118]	[0.092]
Husband Eligible for DC plan	0.502***	0.466***		
	[0.027]	[0.021]		
Wife Eligible for DC plan	-0.374***	-0.424***		
	[0.026]	[0.020]		
Husband receives Social Security	0.023	0.025	0.119	0.144
	[0.029]	[0.023]	[0.148]	[0.115]
Wife receives Social Security	-0.003	0.004	0.040	0.035
	[0.029]	[0.023]	[0.150]	[0.117]
Household debt	-0.000	-0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]
Husband is financial respondent	0.025	0.023*	0.046	0.042
	[0.017]	[0.013]	[0.054]	[0.042]
Husband works	-0.070**	-0.059**		
	[0.030]	[0.024]		
Wife works	0.027	0.028		
	[0.028]	[0.022]		
Husband's job tenure	0.002***	0.002***	0.005**	0.004**
	[0.001]	[0.001]	[0.002]	[0.002]
Wife's job tenure	0.001	-0.000	0.002	0.000
	[0.001]	[0.001]	[0.003]	[0.002]
Respondent has GED or education less than high school	-0.043*	-0.040*	-0.171	-0.182**
	[0.026]	[0.020]	[0.115]	[0.089]
Wife has GED or education less than high school	-0.002	-0.003	-0.033	-0.014
	[0.029]	[0.022]	[0.100]	[0.078]
Constant	0.232	0.333***	0.071	0.266
	[0.150]	[0.118]	[0.537]	[0.419]
Observations	1,214	1,214	369	369

Notes: Standard errors in brackets, *** p<0.01, ** p<0.05, * p<0.1

Table 8: Regression Analysis: The Share of Current Contributions, SCF

	SCF, all ages		SCF, all ages, both eligible for DC plan	
	Husband has larger contributions	Share of contributions to Husbands acct	Husband has larger contributions	Share of contributions to Husbands acct
Age Difference	-0.001	-0.001	-0.008	-0.007**
	[0.002]	[0.001]	[0.007]	[0.003]
Husband Age	-0.000	-0.000	0.002	0.001
	[0.001]	[0.001]	[0.002]	[0.002]
Indicator if Husband over 59 & half	0.010	-0.005	-0.005	-0.022
	[0.032]	[0.021]	[0.075]	[0.053]
Indicator if Wife over 59 & half	-0.053	-0.043	-0.082	-0.067
	[0.041]	[0.030]	[0.118]	[0.090]
Husband's share of income	0.612***	0.423***	1.219***	0.888***
	[0.038]	[0.032]	[0.121]	[0.083]
Husband's Income in 1000's	0.000	0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]
Wife's Income in 1000's	-0.000	-0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]
Husband has DB plan	-0.013	-0.002	-0.007	0.024
	[0.019]	[0.011]	[0.049]	[0.024]
Wife has DB plan	-0.037	-0.027*	-0.070	-0.057**
	[0.029]	[0.014]	[0.056]	[0.024]
Husband Eligible for DC plan	0.446***	0.434***		
	[0.025]	[0.018]		
Wife Eligible for DC plan	-0.255***	-0.341***		
	[0.019]	[0.015]		
Husband receives Social Security	0.060	0.065**	-0.012	0.034
	[0.041]	[0.030]	[0.179]	[0.159]
Wife receives Social Security	-0.005	-0.008	0.105	0.086
	[0.026]	[0.021]	[0.117]	[0.104]
Husband is financial respondent	0.038**	0.012	0.080**	0.018
	[0.016]	[0.011]	[0.035]	[0.021]
Husband works	-0.202***	-0.134***		
	[0.034]	[0.028]		
Wife works	0.151***	0.097***		
	[0.015]	[0.013]		
Husband's job tenure	0.003***	0.003***	0.005**	0.006***
	[0.001]	[0.001]	[0.002]	[0.001]
Wife's job tenure	-0.003*	-0.002***	-0.006**	-0.006***
	[0.001]	[0.001]	[0.003]	[0.002]
Respondent has GED or education less than high school	-0.059**	-0.063***	-0.189	-0.206***
	[0.030]	[0.018]	[0.122]	[0.068]
Wife has GED or education less than high school	-0.037	-0.029	-0.078	-0.044
	[0.031]	[0.019]	[0.123]	[0.070]
Constant	0.130**	0.276***	-0.141	0.042

Notes: Standard errors in brackets, *** p<0.01, ** p<0.05, * p<0.1

Table 9 adds controls for account characteristics and controls for missing information about account characteristics. One limitation is that both the HRS and the SCF only ask questions about plan characteristics to people who report participating. Those who do not participate are less likely to know about the details of the plan. To address this, we include an indicator variable if match information or plan characteristics are missing. While these indicators can not be interpreted causally, controlling for this missing information allows us to separate the impact of having a match from the impact of not knowing if you have access to a match. Recall that our sample is limited to households where at least one spouse contributes. As such, these indicators for missing information will be equal to 1 in all cases where only one spouse contributes, and thus that spouse, by definition, has the larger share and contributes 100 percent of the household contributions. Therefore, inclusion of these indicator variables will impact the coefficients on any variable that is highly correlated with having only one spouse contribute. For example, the coefficient on earnings share drops significantly, but it is difficult to disentangle what is the impact of a spouse with no earnings who by definition will also have missing information about the employer sponsored DC plans. In the discussion of these results we focus only on the coefficients for variables related to account characteristics and suppress the other coefficients (which match those shown in Table 7).

In both the HRS and the SCF, we find that there is evidence that households respond to reported investment choice. In the HRS, when the husband reports any choice about investments, the husband is 5.5 percentage points more likely to make the larger contribution, and his share of the total household contributions will increase by 4.8 percentage points. In the SCF, when the husband reports any choice about investments, the husband is 4.0 percentage points more likely to make the larger contribution (although this is not significant), and his share of the total household contributions will increase by 3.2 percentage points. Similarly, when the wife reports investment choice, she will make a larger share of contributions (and thus the husband will make a smaller share). This suggests that households may prefer to locate their assets in plans that feature greater investment choice, however, in both datasets more than 70 percent of contributors report having investment choice. In the HRS, we are able to look at the impact of auto-enrollment, but find no significant effect. In the SCF, we are also able to control for information about employer match programs. We find that households do not place a larger share of contributions in the accounts of spouses who have access to an employer match. Furthermore, larger match amounts are not associated with a larger share of contributions.

Table 9: Regression Analysis: Account Characteristics and Contribution Amounts

	HRS		SCF, all ages	
	Husband has larger contributions	Share of contributions to Husbands acct	Husband has larger contributions	Share of contributions to Husbands acct
Husband has any investment choice	0.055**	0.048***	0.040	0.032**
	[0.021]	[0.016]	[0.026]	[0.013]
Wife has any investment choice	-0.001	-0.020	-0.087***	-0.072***
	[0.020]	[0.015]	[0.027]	[0.017]
Husband has auto-enrollment	0.002	-0.004		
	[0.018]	[0.013]		
Wife has auto-enrollment	0.010	0.012		
	[0.018]	[0.013]		
Husband receives match			-0.023	-0.004
			[0.022]	[0.015]
Wife receives match			-0.065**	-0.032*
			[0.032]	[0.019]
Husband match amount			-0.012	-0.007
			[0.020]	[0.009]
Wife match amount			-0.002	-0.028**
			[0.024]	[0.012]
Indicator if Husband investment choice missing	0.086**	0.076***	-0.350***	-0.326***
	[0.035]	[0.026]	[0.042]	[0.030]
Indicator if Wife investment choice missing	-0.032	-0.048*	0.156***	0.248***
	[0.033]	[0.025]	[0.038]	[0.025]
Indicator if Husband auto-enrollment missing	-0.459***	-0.427***		
	[0.040]	[0.030]		
Indicator if Wife auto-enrollment missing	0.274***	0.308***		
	[0.039]	[0.029]		
Indicator if Husband match missing			0.088	0.075
			[0.056]	[0.046]
Indicator if Wife match missing			0.000	0.000
			[0.010]	[0.012]
Indicator if Husband match amount missing			-0.164***	-0.146***
			[0.063]	[0.055]
Indicator if Wife match amount missing			0.000	0.000
			[0.038]	[0.034]
Observations	1,214	1,214	.	.

Notes: Standard errors in brackets, *** p<0.01, ** p<0.05, * p<0.1

Robustness

For the regression results, we considered several alternate specifications, which for parsimony are not reported. First, we considered nonlinear regression models such as logit and tobit. The results were qualitatively similar. However, the interpretation of regression coefficients in these models is more complex. Second, we considered models that limited the sample to couples where both were working or to couples where both were contributing. These results were also qualitatively similar, but the sample sizes were smaller, providing less power to detect effects. Third, we considered models in the HRS that distinguished between primary and secondary earners and models in the SCF that limited the sample to those couples where one spouse was over age 50 making them eligible to be included in the HRS. These results were also qualitatively similar.

Additionally, we conducted the same analysis but using the share of accumulated balances in employer based DC plans to define the dependent variables. We report the results of these regressions in the appendix. When considering contributions, we are focusing on current behavior. By considering balances we instead look at the outcome of a series of choices overtime about how much to contribute to each spouse's account. The results largely mirror those shown in Table 7 and Table 8. We find that the share of income earned by the husband has a large and significant impact on whether the husband's employer-sponsored retirement account balances are larger than those of their wife. In these regressions we also look at the impact of the share of assets held in stock on accumulated balances. One possible explanation for a greater share of accumulated balances being held by the husband is that they invest in more equity and thus earn higher returns. However, we find no evidence that the share of assets held in stock impacts the balance held. These results are reported in tables A4 and A5 in the Appendix.

6. IRA Balances

Until now, we have been focusing on household location of retirement savings in employer-sponsored DC accounts. We turn now to household location of retirement savings in IRAs.

6.1 IRA Balances in the SCF

The SCF asks the respondent about IRA account balances, but not IRA contributions. Respondents are first asked if anyone in the couple has an IRA, then how many total accounts for the couple. For each account, they are asked about the type of account (Roth, traditional,

rollover or Koegh), who owns the account, and the balance in that account. We calculate the total number of accounts and the balance summed across all types of IRAs.
In

Table 10, we examine account balances for the sample of SCF households in which at least one spouse is currently working and where we can identify the primary earner. As with DC accounts, husbands in the SCF are more likely than wives to hold an IRA account: 30 percent of husbands have an IRA or Keogh account whereas 26 percent of wives have an IRA or Keogh account when we look at SCF households of all ages. Primary earners are also more likely to have an IRA account.

Husbands have IRA account balances that are more than twice their wives' accounts balances, regardless of whether we consider unconditional account balances, or account balances conditional on having a non-zero balance. Primary earners also have significantly larger IRA account balances than secondary earners.

As we observed with DC plan account balances, we find that conditional on a non-zero balance, mean account balances are much larger than median account balances indicating a highly right-skewed distribution.

Households with one spouse over 50 are more likely to hold IRAs and have larger account balances than households from the full age group, but the differences between husbands and wives and between primary and secondary earners are similar to the full age group.

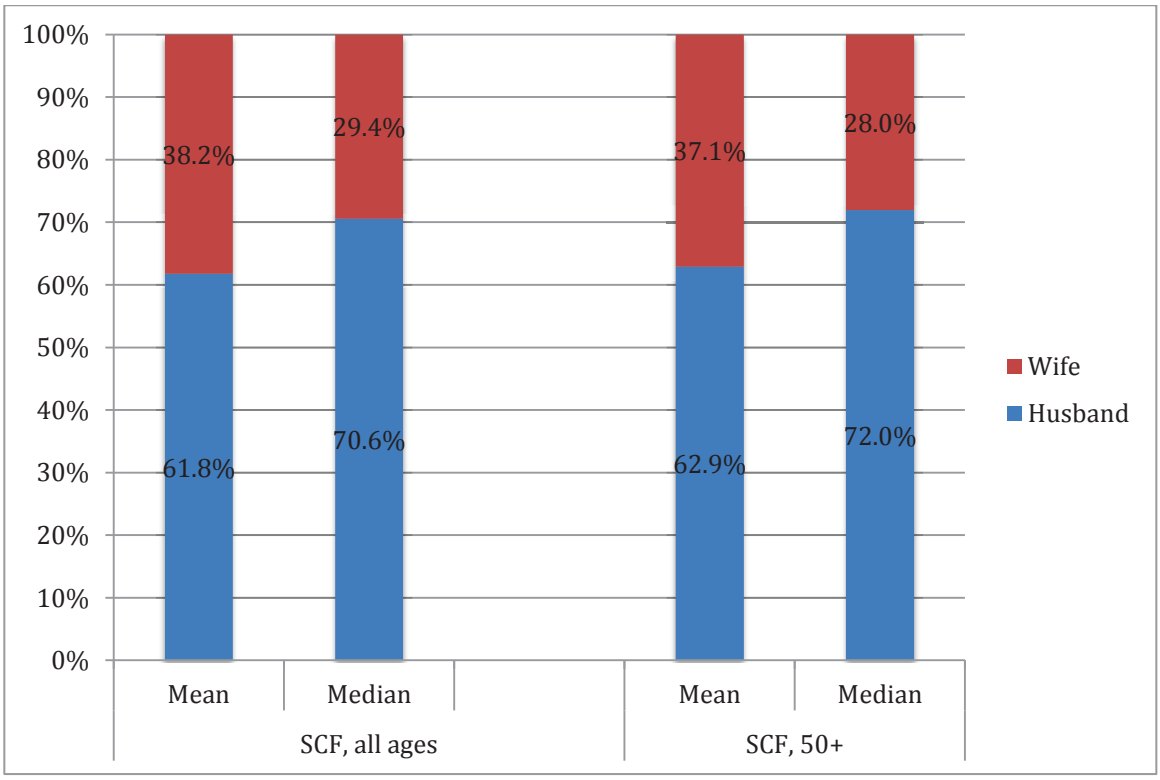
Table 10: Individual Retirement Accounts in Households, SCF

	SCF Sample, All Ages				SCF Sample, Ages 50+			
	Husbands		Wives		Husbands		Wives	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any IRA or Keogh Accounts	30.2%	0.0%	26.0%***	0.0%	37.9%	0.0%	33.0%**	0.0%
Total number of IRA/Keogh accounts held	0.44	0.00	0.33***	0.00	0.60	0.00	0.44***	0.00
Total Balance across all IRA/Keogh accounts	$56,910	$0	$21,081***	$0	$102,736	$0	$36,703***	$0
Total IRA/Keogh Balance conditional on having some balance	$188,570	$48,000	$81,188***	$27,000	$271,109	$75,000	$111,131***	$46,000
	Primary Earners		**Secondary Earners**		**Primary Earners**		**Secondary Earners**	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any IRA or Keogh Accounts	29.5%	0.0%	26.7%**	0.0%	37.3%	0.0%	33.6%*	0.0%
Total number of IRA/Keogh accounts held	0.43	0.00	0.35***	0.00	0.58	0.00	0.46***	0.00
Total Balance across all IRA/Keogh accounts	$52,446	$0	$25,544***	$0	$94,302	$0	$45,137***	$0
Total IRA/Keogh Balance conditional on having some balance	$177,952	$45,000	$95,768***	$30,000	$252,975	$69,000	$134,161***	$47,000
Number of Observations	12103	-	12103	-	6659	-	6659	-

Notes: We indicate rejection of a two-sided t-test of equality of husband's (or PE's) mean and wife's (or SE's) mean at the 1% (***), 5% (**), and 10% (*) levels.

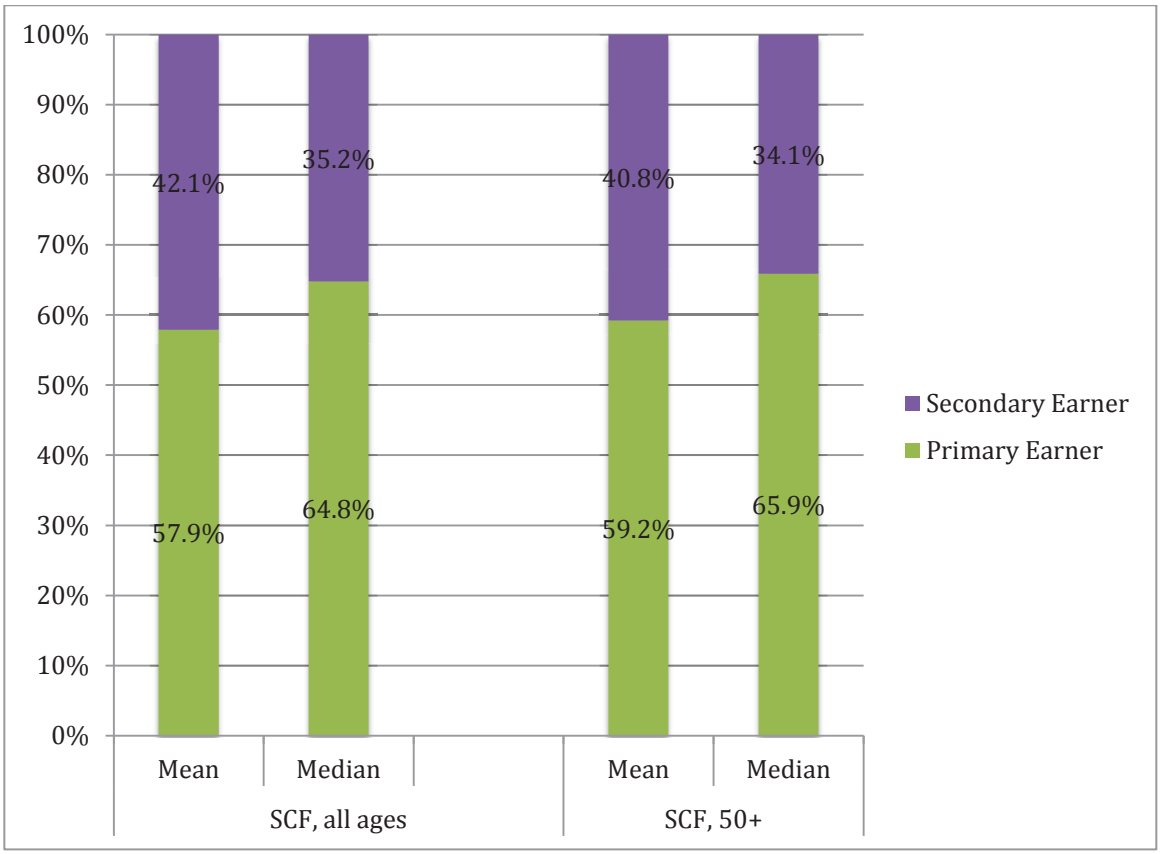
Figure 9 examines the share of IRA assets held by husbands compared to wives. At the mean, husbands hold a slightly larger share of IRA assets, similar to the share of DC assets in Figure 3. Considering households of all ages, husbands hold 62 percent of total household IRA assets and wives hold 38 percent. At the median, husbands hold an even larger share (71 percent).

Figure 9: Share of Household IRA Assets Attributed to Each Spouse, Husbands and Wives



When we compare retirement assets of primary earners to those of secondary earners (Figure 10), we see that primary earners hold a larger share than secondary earners at the mean (58 percent versus 42 percent for the full SCF age range), but the differential between primary and secondary earners is smaller than between husbands and wives.

Figure 10: Share of Household IRA Assets Attributed to Each Spouse, Primary Earners and Secondary Earners



6.2 IRA Balances in the HRS

The HRS also asks the respondent about IRA account balances. Respondents are first asked if anyone in the couple has an IRA, then how many total accounts for the couple. For each account of up to three accounts, they are asked who owns the account, and the balance in that account. However, a limitation of the HRS data is that for any household holding more than three accounts, the ownership of some or all of the accounts may be reported as "both". We calculate the balance summed across all reported accounts for each spouse and the assets that are reported as owned by both. The HRS also asks about IRA contributions, however these contributions are not attributed to either spouse and therefore are not considered here.

In Table 11, we examine account balances for the sample of HRS households in which at least one spouse is currently working and where we can identify the primary earner. Husbands in the HRS are slightly more likely than wives to hold an IRA: 28 percent of husbands have an IRA or Keogh account whereas 26 percent of wives have an IRA or Keogh account and 5 percent of households hold accounts that they report are jointly owned. Primary earners are also more likely to have an IRA.

Husbands have IRA account balances that are larger than their wives' accounts balances, regardless of whether we consider unconditional account balances, or account balances conditional on having a non-zero balance. Overall, five percent of household IRA balances are attributable to jointly owned IRA accounts. However, conditional on a household holding a joint IRA account, 41 percent of household IRA balances are attributable to joint accounts (not shown). Primary earners have slightly higher IRA balances than secondary earners.

As we observed with DC plan account balances, we find that conditional on a non-zero balance, mean account balances are much larger than median account balances indicating a highly right-skewed distribution.

At the mean, husbands hold a larger share of IRA assets (52.5 percent) than wives (42.5 percent), similar to the share of DC assets in Figure 3. Similarly, when we compare retirement assets of primary earners to those of secondary earners, we see that primary earners hold a larger share (53.4 percent) than secondary earners (41.6 percent) at the mean. Additionally five percent of the share of assets are attributed to both spouses. At the median, the joint shares do not sum to 100 percent because in many cases the share is zero. But the medians also suggest that the majority of IRA assets are attributed to the husband.

Table 11: Individual Retirement Accounts in Households, HRS

	Husbands		Wives		Jointly Owned	
	Mean	Median	Mean	Median	Mean	Median
Share with any IRA or Keogh Accounts	28.0%	0.0%	26.2%**	0.0%	4.6%	0.0%
Total Balance across all IRA/Keogh accounts	$36,619	$0	$22,718 ***	$0	$5,738	$0
Total IRA/Keogh Balance conditional on having some balance	$130,796	$60,000	$86,822***	$40,000	$125,871	$67,000
Share of balances attributable to each spouse	52.5%	54.5%	42.5%***	33.7%	5.0%	0.0%
	Primary Earners		**Secondary Earners**		**Both**	
	Mean	Median	Mean	Median	Mean	Median
Share with any IRA or Keogh Accounts	28.8%	0.0%	25.3%***	0.0%	4.6%	0.0%
Total Balance across all IRA/Keogh accounts	$33,514	$0	$25,824***	$ 0	$5,738	$0
Total IRA/Keogh Balance conditional on having some balance	$116,276	$50,000	$101,904***	$50,000	$125,871	$67,000
Share of balances attributable to each spouse	53.4%	56.1%	41.6%***	35.0%	5.0%	0.0%
Number of Observations	2786	-	2786	-	2786	-

Notes: We indicate rejection of a two-sided t-test of equality of husband's (or PE's) mean and wife's (or SE's) mean at the 1% (***), 5% (**), and 10% (*) levels.

6.3 IRA reporting in the ALP

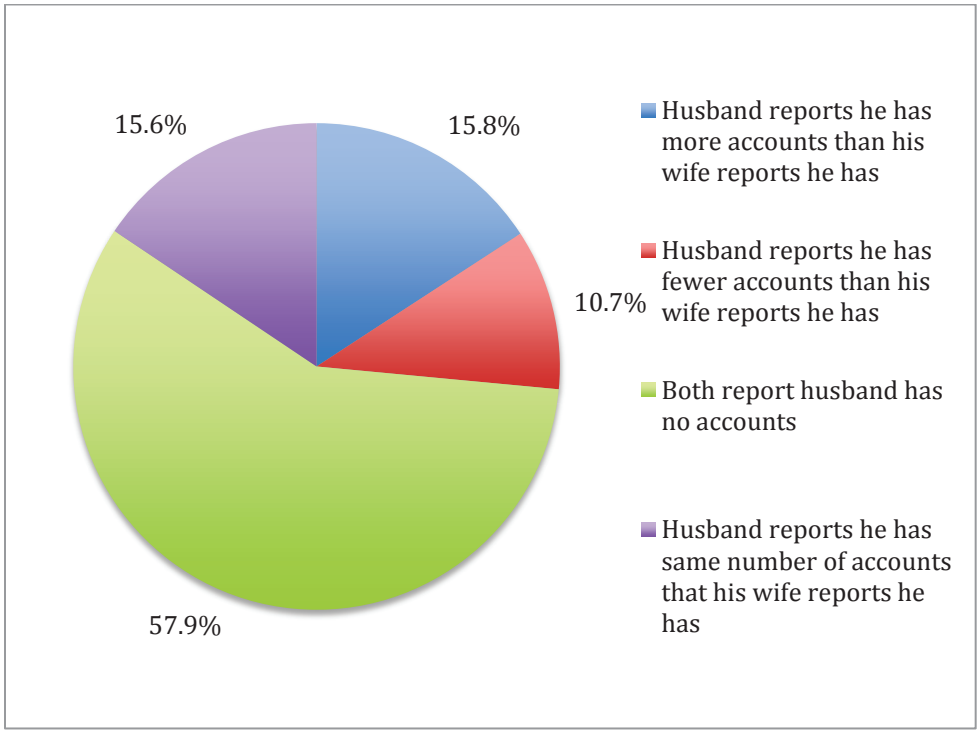
In the ALP, both spouses in 468 couples were asked to report both about their own IRAs as well as those of their spouse. This allows for an opportunity to investigate how reliable survey responses are about the retirement holdings of households. Because only one spouse is the owner of a retirement account, it is possible that both are not fully aware of the accounts held by the other. This may lead to underreporting, or overreporting, of accounts, contributions, or balances. While this may be particularly likely for employment-based accounts, it is also possible for IRAs. Even a person who is the financial respondent for a survey may not have as

much information about his/her spouse's accounts as he/she does about his/her own. To investigate this possibility we use the ALP, where both spouses were asked to report about IRA accounts, to assess whether both spouses provide similar answers about the retirement accounts held by each spouse.

Respondents were first asked about how many accounts their household holds. Then they were asked who owns each account. We used this information to calculate how many accounts each spouse reported were held by the husband and how many were reported held by the wife. We then compared these reports. The survey also asked about balances, but because surveys may not have been completed at the same time, we did not make use of this information.

Figure 11 shows the breakdown of concordant versus discordant reporting of the number of IRA accounts held in the husband's name. The green and purple slices represent concordance, with both reporting the same number of accounts. The blue and red slices represent discordance, with each reporting a different number of accounts. Overall, we see 74 percent agreement: 74 percent of wives report the same number of IRA accounts that the husband holds. For the majority of households (58 percent), both report that the husband has no accounts (the green section). Among those couples that have accounts reported as belonging to the husband, approximately two thirds of couples do not report the same number of accounts. In 16 percent of all couples (and 38 percent of those reporting any accounts in the husband's name), the husband reports that he has more accounts than his wife reports he has. But in 11 percent of households (25 percent of those reporting any account), the wife reports that the husband has more accounts than he reports for himself.

Figure 11: Reporting of accounts in the Husband's Name



When we examine husbands' and wives' reports of the number of IRA/Keogh accounts held by wives in the ALP (Figure 12), we see a similar pattern: 79 percent of married couples report the same number of IRA accounts held by the wife. In 64 percent of households, both spouses report no accounts (green). Among those where any accounts are reported, just under 60 percent of couples do not report the same number of accounts. In 12 percent of households (32 percent of those reporting any account) the husband reports that his wife has fewer accounts than she reports for herself. In nine percent of all couples (and 26 percent of those reporting any accounts in the wife's name), the husband reports that his wife has more IRA accounts than she reports for herself.

Figure 12: Reporting of accounts in the Wife's Name

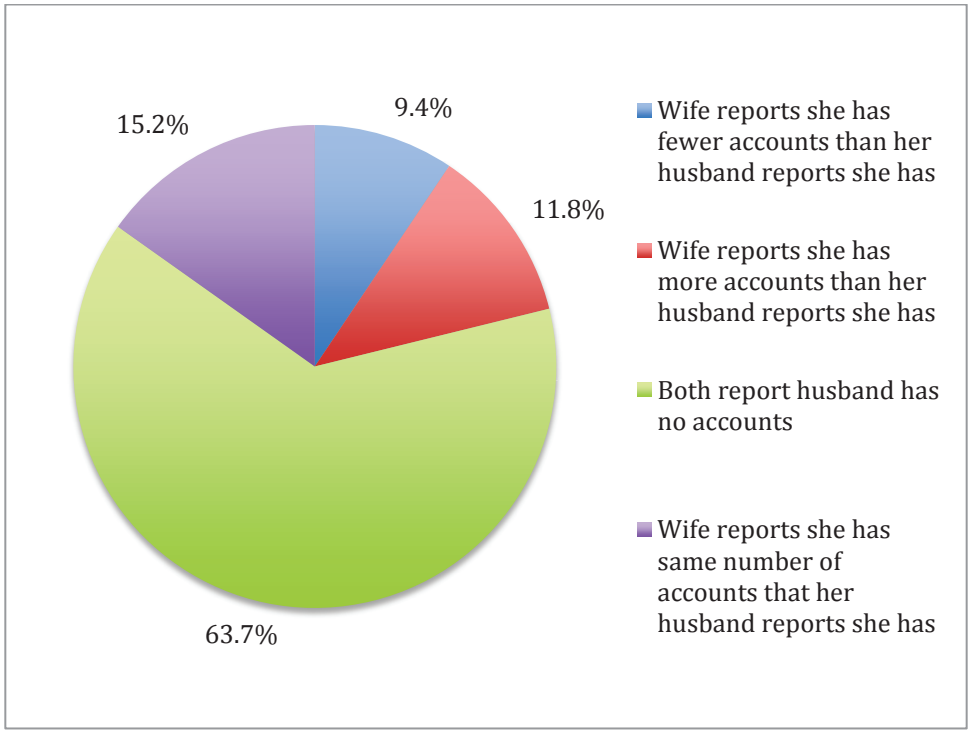


Table 12 compares husbands' and wives' reports of the number of IRA/Keogh accounts held by husbands in the ALP. Consistent with Figure 12 above, we see 74 percent agreement: 74 percent of married couples report the same number of IRA accounts that the husband holds. In 9.8% of households, the husband reports holding one or more accounts, but the wife reports that he holds none. In 8.1% of households, the husband reports that he holds no accounts, but the wife reports that he holds at least one account. In 8.5% of households, both report that the husband holds accounts, but they report different numbers of accounts.

Table 12: Individual Retirement Accounts in Households, HRS

		Number of Husband's accounts reported by Wife				
		0	1	2	3	Total
Number of Husband's Accounts reported by Husband	0	57.9%	7.3%	0.4%	0.4%	66.0%
	1	7.9%	12.4%	1.7%	0.2%	22.2%
	2	1.5%	4.3%	3.2%	0.6%	9.6%
	3	0.4%	1.1%	0.6%	0.0%	2.1%
	Total	67.7%	25.0%	6.0%	1.3%	100.0%

When we examine husbands' and wives' reports of the number of IRA/Keogh accounts held by wives in the ALP, we see a similar pattern: 79 percent of married couples report the same number of IRA accounts that the wife holds. In 9.4% of households, the wife reports holding one

or more accounts, but the husband reports that she holds none. In 8.3% of households, the wife reports that she holds no accounts, but the husband reports that she holds one or more accounts. In 3.3% of households, both report that the wife holds accounts, but they report different numbers of accounts.

Table 13: Individual Retirement Accounts in Households, HRS

		Number of Wife's accounts reported by Wife				
		0	1	2	3	Total
Number of Wife's Accounts reported by Husband	0	63.7%	9.0%	0.2%	0.2%	73.1%
	1	7.7%	13.7%	1.9%	0.0%	23.3%
	2	0.6%	0.6%	1.5%	0.4%	3.2%
	3	0.0%	0.0%	0.4%	0.0%	0.4%
	Total	72.0%	23.3%	4.1%	0.6%	100.0%

Taken together, we see accounts are more likely to be reported by the owner than by the spouse. The non-owner may be unaware of his spouse's retirement holdings or he may misestimate the number of accounts held. However, there are also cases where more accounts are reported by the spouse. These discrepancies may occur for two reasons. First, it is possible that the non-owner spouse actually is more knowledgeable about the household's finances. Second, the non-owner spouse may be less well informed about the others' accounts and may misestimate the number of accounts, or in some cases may not know that a spouse has closed an account. Most discrepancies occur in cases where only one spouse reports accounts.

7. Discussion

In these analyses, we examined the location of household retirement contributions and assets. We focused on a subset of married opposite-sex couples in the HRS and the SCF for whom at least one spouse is in the labor force. This allowed us to consider a subsample of households who potentially have access to employer-based retirement plans. In our descriptive analyses, we found that contributions to husbands' retirement accounts were greater than those to wives' accounts in absolute amounts, but that contributions as a percent of earnings were much closer. We also found large disparities between the contributions of primary and secondary earners. Both the differences between husbands' and wives' and between primary and secondary earners' contributions suggest that contributions are consistent with the incentives created by the rules of DC plans. Husbands and primary earners tend to be older, and couples who put more money in the retirement accounts of older spouses will be able to access those funds at an earlier date.

Furthermore, husbands tend to earn more than their wives and primary earners by definition earn more. In this case, incentives created by employer matches may encourage households to put a similar percent of earnings in each spouse's account, leading to higher contributions for those earning more. Additionally, if only one spouse works for pay, then households will only have the option to make contributions to the working spouse's DC pension plan. While our findings are consistent with the hypothesis that households' behavior is responding to incentives created by retirement plan rules and policies, we can not rule out alternative hypotheses for these observed patterns of behavior. For example, one key limitation of the HRS and SCF data, discussed in more detail below, is that limited information is available about the employer's matching policy.

Given the larger retirement contributions by husbands and primary earners, it is not surprising that we find that retirement account balances also are greater among these two groups.

While we find very consistent results, one possibility is that by only looking at results in the aggregate, we do not observe differences in savings strategies across households. We find that there are significant differences across households, with many households contributing only to the account of one spouse. This strategy might be optimal if only one spouse has access to a DC plan or if one spouse has access to a much more attractive DC plan.

When we look at IRA balances in the HRS and SCF, we again find that retirement assets tend to be held in the name of the husband or the primary earner. While this may be a result of rollover IRAs, it suggests that couples are not balancing IRA contributions across spouses. However, neither the HRS nor the SCF asks if IRA contributions are made in the name of the husband or of the wife.

Because these descriptive findings may mask differences in behavior, we also consider multivariate regression analyses. These results suggest that the primary predictor of the share of contributions attributed to each spouse is in fact the share of income earned by that spouse. This result holds even in households where both spouses report they are eligible to participate in an employer-sponsored DC plan. Unless the availability of an employer match is driving these larger contributions, this finding suggests that households may not be treating their retirement contributions as a joint decision. When we add information about the availability and size of the employer match, we find mixed evidence that it has a significant impact on the location of .contributions. We find no significant difference in contributions based on the age difference between spouses, the age of each spouse, or passing key thresholds, such as age 59 ½ when withdrawals can be made without penalty. At the same time we do find differences in the location of contributions that depend on spouse characteristics that should not impact the optimal location of assets in theory, such as the level of education or job tenure. But in practice these may be correlated with eligibility and transaction costs, and may therefore impact the asset location decision.

The results in the HRS and the SCF are qualitatively similar, although the magnitudes of the effects found and differences between husbands and wives are greater in the SCF. When we

focus our analysis in the SCF on couples where one spouse is age-eligible for the HRS, these differences between the two surveys hold. This may occur for several reasons. First the HRS is designed to survey both spouses, while the SCF often only surveys one spouse. A less informed spouse may provide incomplete information. Second, the question design is slightly different between the two surveys and may contribute to differences. Finally, the SCF oversamples wealthy households, and this oversample while addressed with weights, may still lead to differences in the results.

In the ALP, for approximately 25 percent of couples, the reported number of accounts held by the husband is not the same when the husband reports as when the wife reports. There are several important implications of the mismatch in reporting. First, even though assets are legally viewed as household assets, couples may treat retirement accounts as belonging only to the named owner. As such the non-owner may have incomplete information, which could lead to suboptimal household decision-making. It may speak to a possible benefit of working with a financial professional who encourages households to consider their entire portfolio. Second, it brings into question the optimal design of surveys to collect household finance information. Respondents may be less knowledgeable about the asset holdings in their spouse's name, leading to misreporting of asset holdings. Alternatively, one spouse may be more knowledgeable about both their own and their spouse's accounts. There are several potential ways to address this. In the HRS and the SCF, questions about IRAs are included in sections of the survey that typically only have one respondent. In the HRS, moving this to a person level module, where each spouse reports his or her own holdings, rather than a household level module might improve reporting, if each spouse is more aware of their own holdings. Alternatively, questions could be added to ascertain how certain the respondent is. One potential solution would be to conduct more surveys as household surveys where both respondents are asked to participate simultaneously.

There are several limitations of our analyses. First, as suggested by the ALP analysis, reporting of retirement assets in survey data is likely to be imperfect. Spouses may not be fully aware of each other's accounts. Furthermore, because many do not check their account balances regularly, they may not be able to report balances accurately. Second, a key limitation of studying retirement saving behavior with survey data is that non-participants have a hard time identifying the types of retirement plans that their employers may offer, and so it is difficult to accurately measure eligibility for DC plans. However, in understanding household decisions, perceived eligibility is likely more important than actual eligibility. Third, questions about employer-sponsored retirement plan characteristics are only asked to people who hold an account. While those who don't hold accounts are unlikely to be able to accurately report the characteristics of their employers' retirement plans, this limitation means that we can not assess the impact of account characteristics on the whole population. Fourth, each of the datasets is imperfect, however we address this limitation by considering several different sources of data.

We find that household retirement savings tend to be concentrated among one spouse, which may be consistent with individual rather than joint decisions. Perhaps because assets are held in only one person's name, couples may approach them as individual choices.

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Appendix: Additional Tables

Table A1, Panel A: DC Account Balances and Contributions for Households Who Report Making Contributions, HRS

	Only Husband Contributes				Only Wife contribute				Both Contribute			
	Husband		Wife		Husband		Wife		Husband		Wife	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any reported balance	92.5%	100.0%	27.4%***	0.0%	23.8%	0.0%	92.1%***	100.0%	94.6%	100.0%	94.1%	100.0%
Total balance across all DC accounts	$167,247	$70,500	$22,343***	$0	$28,197	$0	$95,120***	$35,000	$162,427	$70,000	$97,369***	$49,500
Share of household balances held by each spouse	89.3%	100.0%	10.7%***	0.0%	13.9%	0.0%	86.1%***	100.0%	56.4%	59.6%	43.6%***	40.4%
Annual amount contributed	$7,250	$3,950	$0***	$0	$0	$0	$4,015***	$1,580	$7,892	$3,520	$4,725***	$2,265
Contribution as percent of pay	10.6%	7.0%	0.0%***	0.0%	0.0%	0.0%	9.9%***	6.0%	11.5%	7.5%	9.2%	6.0%
Annual amount contributed conditional on making a contribution	$7,250	$3,950	.	.	.	.	$4,015	$1,580	$7,892	$3,520	$4,725	$2,265
Contribution as percent of pay conditional on making a contribution	.106074	.07	.	.	.	.	9.9%	6.0%	11.5%	7.5%	9.2%	6.0%
Share of contributions made by each spouse	100.0%	100.0%	0.0%***	0.0%	0.0%	0.0%	100.0%***	100.0%	57.0%	61.3%	43.0%***	38.7%
Annual amount contributed by employer	$5,887	$2,000	$194***	$0	$452	$0	$2,947***	$1,000	$6,673	$2,000	$3,041***	$1,250
Employer contribution as percent of pay	5.8%	3.7%	0.4%***	0.0%	0.5%	0.0%	5.3%***	3.0%	7.6%	4.0%	5.4%*	3.0%
Annual amount contributed by employer conditional on a contribution	$7,552	$3,000	$4,277	$1,260	$9,741	$2,640	$4,094	$1,968	$7,965	$3,000	$3,925**	$1,935
Employer contribution as percent of pay conditional on making a contribution	7.4%	5.0%	8.7%	5.1%	11.4%	6.0%	7.3%	5.0%	9.1%	5.0%	6.9%	4.4%
Share of employer contributions for each spouse	76.6%	100.0%	2.1%***	0.0%	3.5%	0.0%	70.5%***	100.0%	56.6%	65.6%	40.7%***	30.6%
Number of Observations	508	=	508	=	496	=	496	=	222	=	222	=

Notes: We indicate rejection of a two-sided t-test of equality of husband's mean and wife's mean at the 1% (***), 5% (**), and 10% (*) levels.

Table A1, Panel B: DC Account Balances and Contributions for Households Who Report Making Contributions, SCF, Full Age Sample

	Only Husband Contributes				Only Wife contribute				Both Contribute			
	Husband		Wife		Husband		Wife		Husband		Wife	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any reported balance	88.4%	100.0%	8.1%***	0.0%	13.6%	0.0%	84.6%***	100.0%	86.4%	100.0%	85.1%	100.0%
Total balance across all DC accounts	$137,174	$50,000	$4,002***	$0	$24,327	$0	$82,083***	$20,000	$119,699	$39,000	$75,348***	$25,000
Share of household balances held by each spouse	96.9%	100.0%	3.1%***	0.0%	8.0%	0.0%	92.0%***	100.0%	56.6%	62.1%	43.4%***	37.9%
Annual amount contributed	$7,792	$4,200	$0***	$0	$0	$0	$4,832***	$2,300	$8,265	$4,080	$5,547***	$3,360
Contribution as percent of pay	6.8%	6.0%	0.0%***	0.0%	0.0%	0.0%	6.8%***	5.0%	8.0%	7.0%	7.6%	6.0%
Annual amount contributed conditional on making a contribution	$7,964	$4,320	.	.	.	.	$4,897	$2,400	$8,343	$4,080	$5,547	$3,360
Contribution as percent of pay conditional on making a contribution	7.0%	6.0%	.	.	.	.	6.8%	5.0%	8.1%	7.0%	7.6%	6.0%
Share of contributions made by each spouse	97.8%	100.0%	0.0%***	0.0%	0.0%	0.0%	98.7%***	100.0%	55.7%	56.5%	44.3%***	43.5%
Annual amount contributed by employer	$4,044	$1,900	$75***	$0	$254	$0	$2,001***	$1,080	$3,689	$1,680	$2,315***	$1,440
Employer contribution as percent of pay	3.3%	3.0%	0.2%***	0.0%	0.4%	0.0%	3.1%***	3.0%	3.5%	3.0%	3.3%	3.0%
Annual amount contributed by employer conditional on a contribution	$5,439	$2,880	$2,107***	$1,560	$5,227	$3,120	$2,829*	$1,800	$5,172	$3,000	$3,251***	$2,160
Employer contribution as percent of pay conditional on making a contribution	4.4%	3.0%	6.3%	5.0%	7.3%	6.0%	4.4%*	4.0%	5.0%	4.0%	4.6%	4.0%
Share of employer contributions for each spouse	73.0%	100.0%	1.7%***	0.0%	3.6%	0.0%	68.9%**	100.0%	47.6%	53.6%	40.8%**	36.0%
Number of Observations	3293		3293		1502		1502		1620		1620	

Notes: We indicate rejection of a two-sided t-test of equality of husband's mean and wife's mean at the 1% (***), 5% (**), and 10% (*) levels.

Table A1, Panel C: DC Account Balances and Contributions for Households Who Report Making Contributions, SCF, Age 50+

	Only Husband Contributes				Only Wife contribute				Both Contribute			
	Husband		Wife		Husband		Wife		Husband		Wife	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any reported balance	87.8%	100.0%	6.3%***	0.0%	13.0%	0.0%	81.5%***	100.0%	79.0%	100.0%	84.5%	100.0%
Total balance across all DC accounts	$198,459	$82,000	$4,212***	$0	$39,416	$0	$123,133***	$30,000	$168,395	$55,000	$118,582*	$43,000
Share of household balances held by each spouse	97.5%	100.0%	2.5%***	0.0%	7.7%	0.0%	92.3%***	100.0%	53.1%	57.1%	46.9%*	42.9%
Annual amount contributed	$9,646	$5,160	$0***	$0	$0	$0	$5,653***	$2,160	$8,618	$4,200	$6,301	$3,960
Contribution as percent of pay	7.9%	6.0%	0.0%***	0.0%	0.0%	0.0%	7.6%***	5.0%	8.4%	7.0%	8.2%	7.0%
Annual amount contributed conditional on making a contribution	$10,048	$5,520	.	.	.	.	$5,734	$2,160	$8,713	$4,320	$6,303	$3,960
Contribution as percent of pay conditional on making a contribution	8.2%	6.0%	.	.	.	.	7.6%	5.0%	8.5%	7.0%	8.2%	7.0%
Share of contributions made by each spouse	96.0%	100.0%	0.0%***	0.0%	0.0%	0.0%	98.6%***	100.0%	55.0%	57.1%	45.0%***	42.9%
Annual amount contributed by employer	$3,948	$2,040	$82***	$0	$250	$0	$2,154***	$840	$3,965	$1,200	$2,369*	$1,080
Employer contribution as percent of pay	3.3%	3.0%	0.2%***	0.0%	0.3%	0.0%	3.1%***	3.0%	3.3%	2.0%	3.1%	3.0%
Annual amount contributed by employer conditional on a contribution	$5,332	$3,120	$2,578***	$3,000	$5,994	$2,800	$3,205	$1,560	$6,181	$3,000	$3,454**	$2,100
Employer contribution as percent of pay conditional on making a contribution	4.4%	3.0%	5.2%	6.0%	8.3%	7.0%	4.6%	4.0%	5.2%	4.0%	4.5%	4.0%
Share of employer contributions for each spouse	73.0%	100.0%	1.5%***	0.0%	3.5%	0.0%	66.2%***	100.0%	42.5%	45.9%	42.1%	37.5%
Number of Observations	1850		1850		860		860		792		792	

Notes: We indicate rejection of a two-sided t-test of equality of husband's mean and wife's mean at the 1% (***), 5% (**), and 10% (*) levels.

Table A2: DC Account Balances and Contributions, HRS, Excluding "Don't Know"

	Husbands		Wives		Primary Earner		Secondary Earner	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Share with any reported balance	40.5%	0.0%	40.9%	0.0%	53.3%	100.0%	28.0%	0.0%
Total Balance across all DC accounts	$68,974	$0	$40,458	$0	$81,647	$4,085	$27,785	$0
Balance conditional on having some balance	$171,318	$75,000	$99,085	$37,750	$153,652	$62,000	$99,393	$35,000
Share of household balances held by each spouse	52.8%	63.0%	47.2%	37.0%	74.0%	100.0%	26.0%	0.0%
Share making any contribution to a DC account	24.9%	0.0%	24.3%	0.0%	36.7%	0.0%	12.6%	0.0%
Annual amount contributed	$1,836	$0	$973	$0	$2,376	$0	$433	$0
Contribution as percent of pay	2.7%	0.0%	2.1%	0.0%	3.6%	0.0%	1.3%	0.0%
Annual amount contributed conditional on making a contribution	$7,362	$3,980	$4,005	$1,935	$6,478	$3,175	$3,450	$1,740
Contribution as percent of pay conditional on making a contribution	10.7%	7.0%	8.8%	6.0%	9.7%	6.5%	10.0%	6.0%
Share of contributions made by each spouse	21.8%	0.0%	20.1%	0.0%	33.8%	0.0%	8.0%	0.0%
Share of contributions made by each spouse conditional on any household contribution	52.0%	63.2%	48.0%	36.8%	80.9%	100.0%	19.1%	0.0%
Share with employer making any contribution	23.7%	0.0%	22.5%	0.0%	34.1%	0.0%	12.2%	0.0%
Annual amount contributed by employer	$1,800	$0	$900	$0	$2,318	$0	$382	$0
Employer contribution as percent of pay	2.0%	0.0%	1.7%	0.0%	2.8%	0.0%	0.9%	0.0%
Annual amount contributed by employer conditional on a contribution	$7,615	$2,961	$3,996	$1,845	$6,805	$2,748	$3,156	$1,400
Employer contribution as percent of pay conditional on making a contribution	8.5%	5.0%	7.6%	5.0%	8.3%	5.0%	7.4%	4.9%
Share of employer contributions for each spouse	20.8%	0.0%	18.7%	0.0%	31.6%	0.0%	7.8%	0.0%
Share of employer contributions for each spouse conditional on a contribution	52.7%	69.7%	47.3%	30.3%	80.1%	100.0%	19.9%	0.0%
Employer contribution as share of total employer plus employee contribution	44.6%	45.5%	45.7%	50.0%	44.9%	48.3%	45.8%	50.0%
Ratio of employer to employee contributions	485.0%	66.7%	352.6%	75.0%	436.4%	66.7%	370.9%	73.0%
Share with a defined benefit plan	8.8%	0.0%	5.1%	0.0%	8.6%	0.0%	5.3%	0.0%
Share that have choice about investments	33.2%	0.0%	32.1%	0.0%	44.4%	0.0%	20.9%	0.0%
Share with Auto enrollment	35.5%	0.0%	33.2%	0.0%	38.0%	0.0%	27.2%	0.0%
Total share of assets in employer stock	1.5%	0.0%	1.1%	0.0%	1.8%	0.0%	0.9%	0.0%
Total share of assets in employer stock conditional on any balance	3.8%	0.0%	2.7%	0.0%	3.3%	0.0%	3.1%	0.0%
Total share of assets in stock	19.7%	0.0%	16.9%	0.0%	25.1%	0.0%	11.5%	0.0%
Total share of assets in stock conditional on any balance	48.9%	50.0%	41.5%	33.8%	47.2%	49.4%	41.3%	34.1%
Earnings	$43,567	$27,000	$28,042	$16,000	$58,781	$43,000	$12,828	$0
Age	61.4	60.0	58.4	57.0	59.7	58.0	60.1	59.0
Male	100.0%	100.0%	0.0%	0.0%	57.5%	100.0%	42.5%	0.0%
Financial respondent	59.3%	100.0%	40.7%	0.0%	58.1%	100.0%	41.9%	0.0%
Primary earner	57.5%	100.0%	42.5%	0.0%	100.0%	100.0%	0.0%	0.0%
Number of Observations	2454	=	2454	=	2454	=	2454	=

Table A3: DC Account Balances and Contributions for Financial Respondents and Non-Financial Respondents, HRS Sample

	Financial Respondent		Not Financial Respondent	
	Mean	Median	Mean	Median
Share with any reported balance	46.7%	0.0%	37.5%***	0.0%
Total Balance across all DC accounts	$73,229	$0	$40,231***	$0
Balance conditional on having some balance	$157,299	$62,000	$107,462 **	$40,000
Share of household balances held by each spouse	58.8%	78.8%	41.2%***	21.2%
Share making any contribution to a DC account	29.7%	0.0%	22.3%***	0.0%
Annual amount contributed	$1,971	$0	$1,071 ***	$0
Contribution as percent of pay	3.0%	0.0%	2.4%	0.0%
Annual amount contributed conditional on making a contribution	$6,632	$3,110	$4,812 *	$2,130
Contribution as percent of pay conditional on making a contribution	10.0%	6.4%	10.7%	6.0%
Share of contributions made by each spouse	26.2%	0.0%	17.8%***	0.0%
Share of contributions made by each spouse conditional on any household contribution	59.6%	99.0%	40.4%***	1.0%
Share with employer making any contribution	26.4%	0.0%	20.2%***	0.0%
Annual amount contributed by employer	$1,759	$0	$922 ***	$0
Employer contribution as percent of pay	2.1%	0.0%	1.6%***	0.0%
Annual amount contributed by employer conditional on a contribution	$6,676	$2,665	$4,570 **	$2,005
Employer contribution as percent of pay conditional on making a contribution	7.9%	5.0%	7.9%	5.0%
Share of employer contributions for each spouse	23.3%	0.0%	16.6%***	0.0%
Share of employer contributions for each spouse conditional on a contribution	58.4%	98.3%	41.6%***	1.7%
Employer contribution as share of total employer plus employee contribution	41.7%	41.6%	44.6%	47.4%
Ratio of employer to employee contributions	415.9%	55.1%	410.4%	60.0%
Share with a defined benefit plan	8.1%	0.0%	5.2%***	0.0%
Share that have choice about investments	39.3%	0.0%	29.3%***	0.0%
Share with Auto enrollment	38.8%	0.0%	36.4%	0.0%
Total share of assets in employer stock	1.5%	0.0%	1.2%	0.0%
Total share of assets in employer stock conditional on any balance	3.2%	0.0%	3.2%	0.0%
Total share of assets in stock	21.1%	0.0%	15.3%***	0.0%
Total share of assets in stock conditional on any balance	45.3%	42.6%	40.9%***	33.0%
Earnings	$45,121	$27,000	$30,261 ***	$18,000
Age	60.4	59.0	59.0***	58.0
Male	59.0%	100.0%	41.0%***	0.0%
Primary earner	57.8%	100.0%	42.2%***	0.0%
Number of Observations	2786	=	2786	=

Table A4: Regression Analysis: The Share of Accumulated Balances

	HRS		SCF, all ages	
	Husband has larger account balance	Share of account balance held by husband	Husband has larger account balance	Share of account balance held by husband
Age Difference	-0.002	-0.002	0.000	0.000
	[0.002]	[0.002]	[0.002]	[0.001]
Husband Age	0.000	0.001	-0.002**	-0.001*
	[0.003]	[0.002]	[0.001]	[0.001]
Indicator if Husband over 59 & half	-0.031	-0.023	-0.024	-0.025
	[0.030]	[0.025]	[0.036]	[0.024]
Indicator if Wife over 59 & half	-0.017	-0.013	-0.027	-0.007
	[0.032]	[0.027]	[0.040]	[0.028]
Husband's share of income	0.289***	0.263***	0.296***	0.223***
	[0.044]	[0.037]	[0.055]	[0.035]
Husband's Income in 1000's	0.000	0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]
Wife's Income in 1000's	-0.000	-0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]
Husband has DB plan	-0.043	-0.059**	-0.066***	-0.066***
	[0.032]	[0.027]	[0.020]	[0.015]
Wife has DB plan	0.060	0.040	0.048*	0.076***
	[0.040]	[0.034]	[0.028]	[0.020]
Huband Eligible for DC plan	0.296***	0.296***	0.544***	0.504***
	[0.025]	[0.021]	[0.025]	[0.018]
Wife Eligible for DC plan	-0.269***	-0.270***	-0.304***	-0.376***
	[0.024]	[0.020]	[0.021]	[0.016]
Husband receives Social Security	0.063**	0.034	0.033	0.034*
	[0.032]	[0.027]	[0.036]	[0.020]
Wife receives Social Security	-0.018	-0.005	0.045*	0.010
	[0.032]	[0.027]	[0.025]	[0.018]
Household debt	-0.000	-0.000		
	[0.000]	[0.000]		
Husband is financial respondent	0.078***	0.061***	0.047**	0.039***
	[0.019]	[0.016]	[0.020]	[0.014]
Husband works	-0.035	-0.026	-0.178***	-0.123***
	[0.031]	[0.026]	[0.041]	[0.025]
Wife works	0.096***	0.070***	0.098***	0.077***
	[0.030]	[0.025]	[0.016]	[0.013]
Husband's job tenure	0.003***	0.002***	0.006***	0.005***
	[0.001]	[0.001]	[0.001]	[0.001]
Wife's job tenure	-0.004***	-0.003***	-0.006***	-0.005***
	[0.001]	[0.001]	[0.001]	[0.001]
Respondent has GED or education less than high school	-0.088***	-0.073***	0.012	-0.012
	[0.030]	[0.025]	[0.031]	[0.023]
Wife has GED or education less than high school	0.050	0.060**	-0.061**	-0.040*
	[0.033]	[0.027]	[0.029]	[0.023]
Constant	0.275*	0.261*	0.356***	0.386***
	[0.163]	[0.136]	[0.060]	[0.037]

Notes: Standard errors in brackets, *** p<0.01, ** p<0.05, * p<0.1

Table A5: Regression Analysis: Account Characteristics and Contribution Amounts

	HRS		SCF, all ages	
	Husband has larger balance	Share of balance in Husbands acct	Husband has larger balance	Share of balance in Husbands acct
Husband has any investment choice	0.028	0.012	0.037	0.025**
	[0.027]	[0.015]	[0.025]	[0.013]
Wife has any investment choice	-0.072***	-0.044***	0.004	-0.020
	[0.025]	[0.014]	[0.028]	[0.016]
Husband has autoenrollment	-0.023	-0.008		
	[0.022]	[0.013]		
Wife has autoenrollment	-0.038*	-0.017		
	[0.022]	[0.013]		
Husband receives match			-0.039	-0.016
			[0.032]	[0.012]
Wife receives match			-0.057	-0.037*
			[0.036]	[0.020]
Husband match amount			-0.008	0.001
			[0.018]	[0.013]
Wife match amount			-0.051**	-0.041***
			[0.024]	[0.016]
Husband's share of assets in stock	-0.012	0.007	-0.008	0.002
	[0.028]	[0.016]	[0.034]	[0.020]
Wife's share of assets in stock	0.030	0.014	0.027	0.007
	[0.027]	[0.016]	[0.054]	[0.042]
Indicator if Husband investment choice missing	0.159**	0.096**	0.063	0.075***
	[0.078]	[0.045]	[0.041]	[0.023]
Indicator if Wife investment choice missing	-0.235***	-0.128***	-0.038	-0.000
	[0.075]	[0.043]	[0.042]	[0.025]
Indicator if Husband autoenrollment missing	-0.044	0.001		
	[0.048]	[0.027]		
Indicator if Wife autoenrollment missing	-0.008	-0.007		
	[0.046]	[0.027]		
Indicator if Husband match missing			-0.013	-0.011
			[0.055]	[0.032]
Indicator if Wife match missing			0.000	0.000
			[0.006]	[0.005]
Indicator if Husband match amount missing			-0.104*	-0.046
			[0.058]	[0.031]
Indicator if Wife match amount missing			0.000	0.000
			[0.039]	[0.017]
Husband's share of assets in stock missing	-0.671***	-0.606***	-0.561***	-0.541***
	[0.069]	[0.040]	[0.046]	[0.028]
Wife's share of assets in stock missing	0.441***	0.453***	0.319***	0.355***
	[0.065]	[0.037]	[0.049]	[0.031]
Observations	1,155	1,155		

Notes: Standard errors in brackets, *** p<0.01, ** p<0.05, * p<0.1